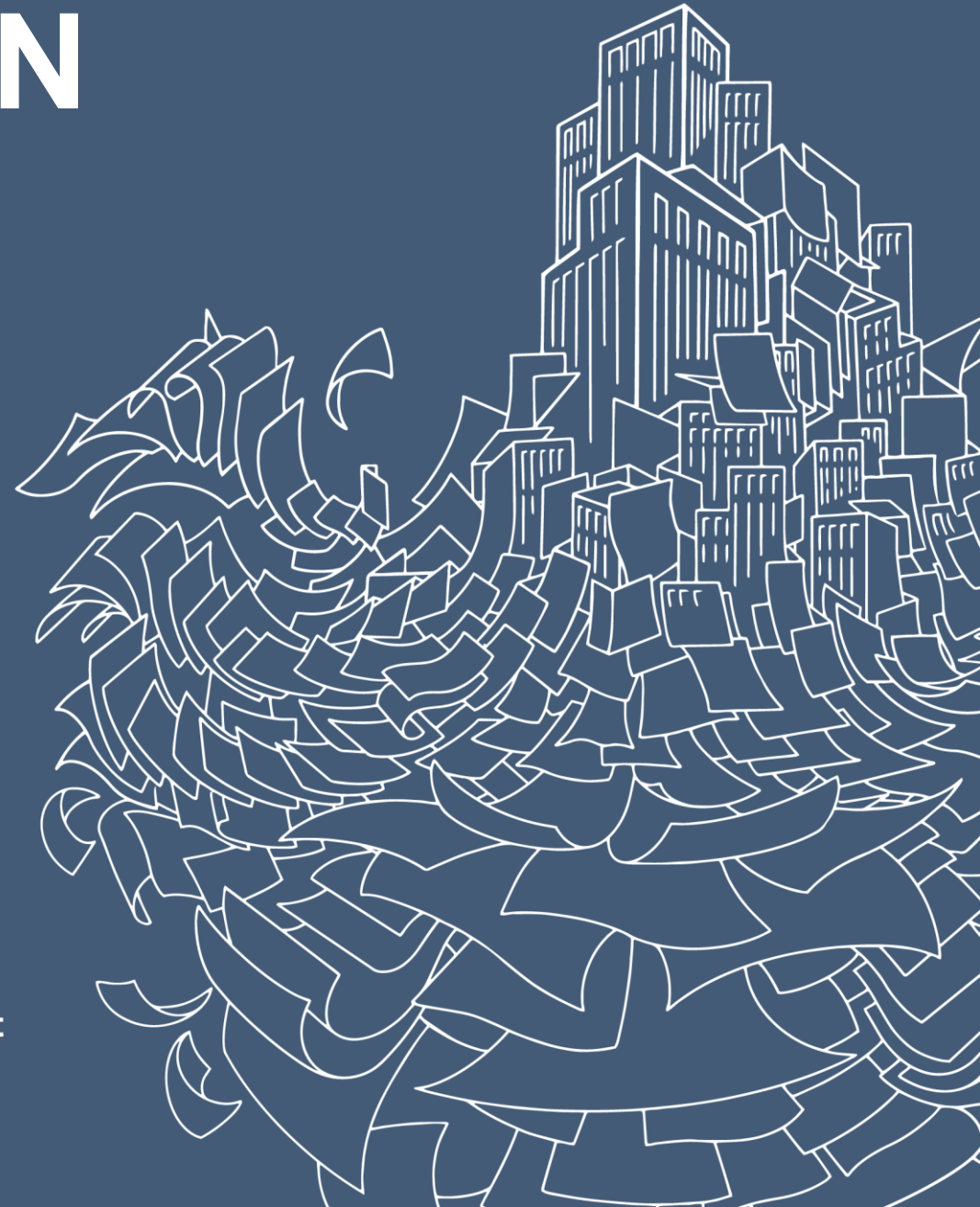


SUSTAINABLE HOTEL CONSTRUCTION



**ADDLESHAW
GODDARD**

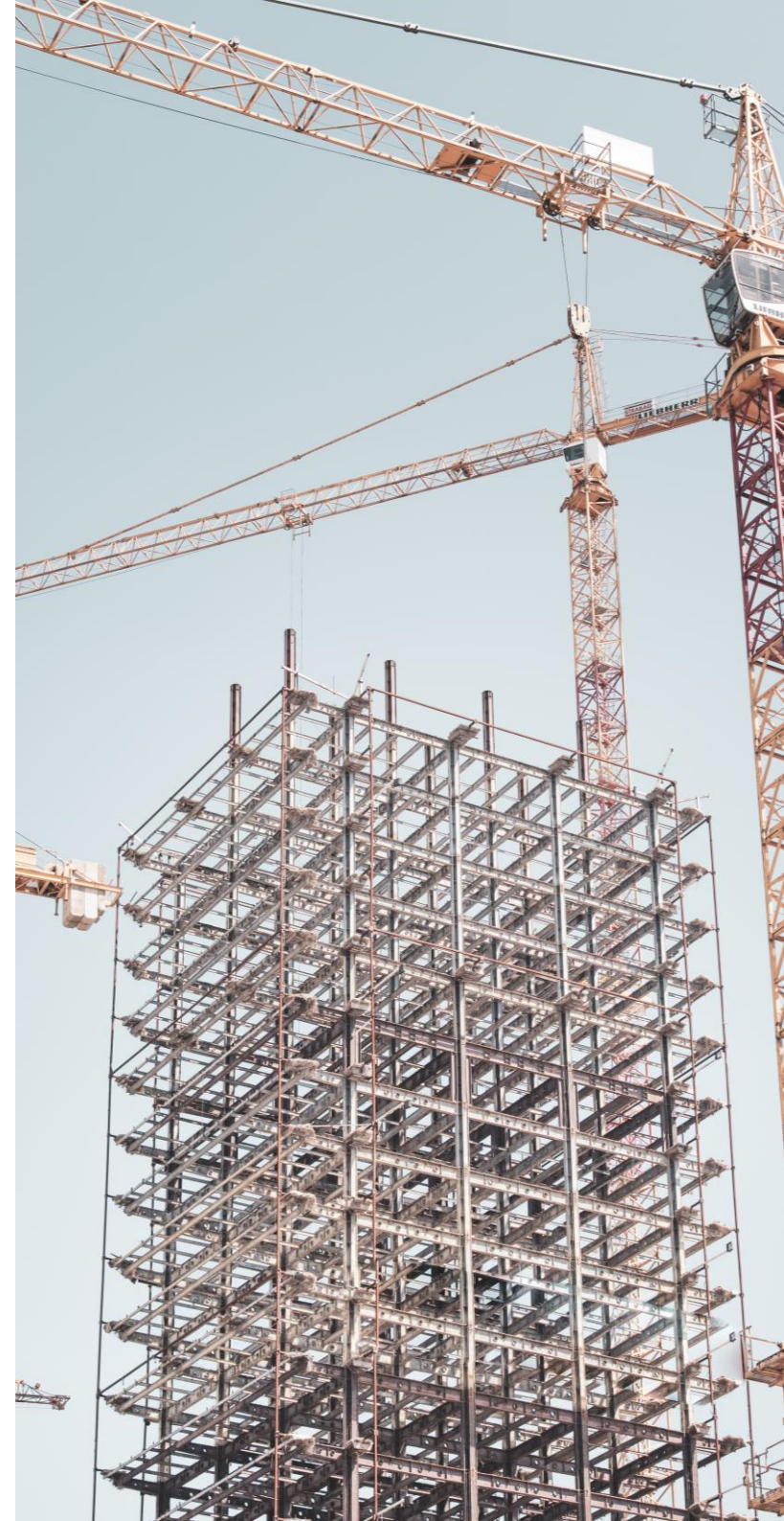
MORE IMAGINATION **MORE IMPACT**



**Energy &
Environment
Alliance**

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LEADING THE HOSPITALITY SECTOR TO NZC



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This paper, spearheaded for the Energy & Environment Alliance (EEA) by Addleshaw Goddard (AG) and supported by The Chancery Lane Project (TCLP), offers model drop-in clauses for construction contracts in the hospitality sector. It equips investors and developers with the legal foundation for the delivery of Net Zero Carbon (NZC) and other environmental, social and governance (ESG) obligations in construction contracts. The EEA and Addleshaw Goddard are dedicated to refining these clauses in line with ongoing changes in regulation and capital markets. Over the coming months, this work, which relates to England and Wales, will be extended to other international jurisdictions including Ireland, Scotland, France, Germany, and Dubai.

Why is this important?

The number of governments enshrining into law national commitments to decarbonise their economies continues to grow. According to the United Nations Environmental Programme (also known as UNEP), more than 136 countries now reference building emission reductions in their national commitments and more than 80 countries (plus local governments and cities) have now adopted building energy codes. Against this backdrop, the hospitality sector – which is real estate intensive – must accelerate the design, construction, and operation of green buildings – embracing the entire life cycle of the asset which includes embodied carbon.

Given mounting regulatory pressure and the response of global capital markets, the financial repercussions of a delayed response are becoming evident in asset valuations and the

cost of capital. Addleshaw Goddard recently completed a survey of over 1,000 senior business and finance leaders across the UK and Europe (including 450 funders and lenders) as part of its "Sustainability: Pain to Net Gain" report. The findings speak for themselves. 80% of finance companies said that they would stop funding the real estate sector if it did not adequately address the transition to a sustainable economy.

Unfortunately, the construction industry is one of the biggest polluters in the world, with some estimating that the industry is responsible for 50% of climatic change. Construction contracts therefore play a critical role in tackling both operational and embodied carbon, among other environmental factors such as land use and the natural environment, resources including water, circularity, and waste. In addition to setting out the obligations, rights, and liabilities of respective parties, construction contracts establish what is to be built, how it is to be built, by who, and at what cost. Construction contracts therefore govern a huge array of factors which can be potentially damaging for a hotel both during the construction phase and subsequently, when a hotel becomes operational. For example, considerations pertaining to construction related materials, where and how they are sourced, transported, used, and how any construction waste is treated, directly impacts levels of embodied as well as operational carbon emissions.

KEY ORGANISATIONS AND USE OF CONTENT

- The **EEA** is a not-for-profit coalition of hospitality sector leaders, working with renowned experts to achieve an exciting new vision of the world – one which is green, sustainable, and where everyone can prosper. This vision is one that consumers are increasingly demanding, it is one that investors are backing, and it is one for which governments worldwide are legislating.
- The **EEA General Counsels' Committee (Committee)** unites the hospitality sector's leading lawyers, to work together for the betterment of the organisations they represent, and the advancement of the hospitality industry for people, planet, and profit. The Committee collaborates with global law firms and The Chancery Lane Project (TCLP) to pioneer climate conscious contracting.
- **TCLP** is a collaborative effort of over 2,500 lawyers from around the world, working to develop new contracts and model laws to help fight climate change. The EEA is delighted to be working closely with TCLP to achieve legal provisions enabling the hospitality industry's journey to Net Zero Carbon (NZC) investment and operations.
- **AG** is a multi-national law firm based in London with over 1600 lawyers operating in 17 offices around the world. AG has been at the forefront of the work with TCLP to help tackle climate change and its dedicated hotels team has produced this document in conjunction with the EEA.
- **Disclaimer, Copyright and Limitation of Liability:** The suggested climate clauses in Part 2 of this paper are free to use. You may use them for commercial purposes, non-commercial academic purposes or research, subject to the following conditions:
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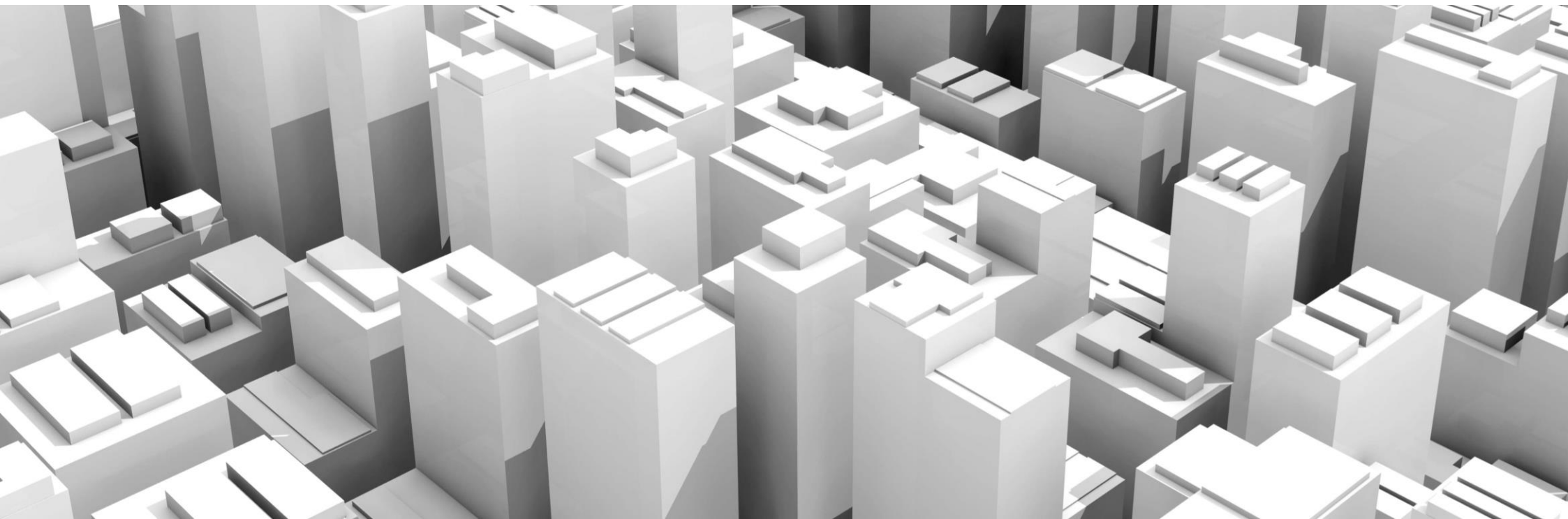
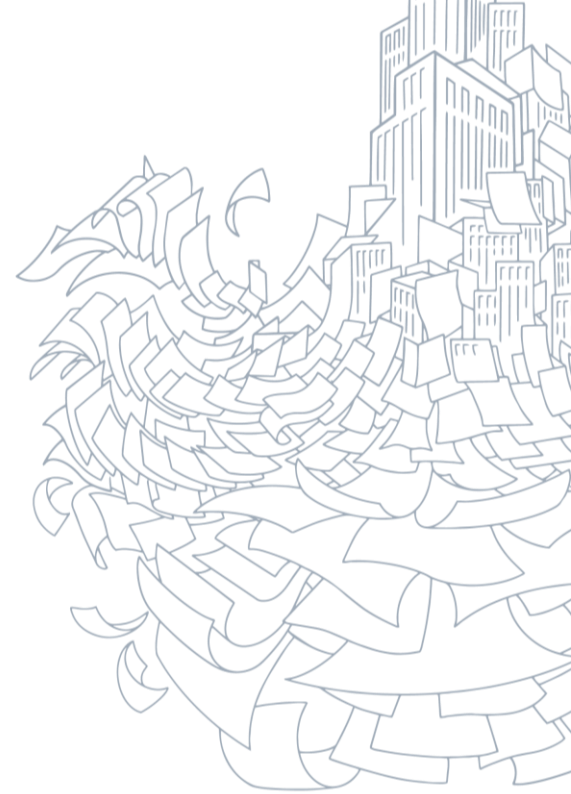


PART ONE: IMPORTANT CONSIDERATIONS

LEGAL AND COMMERCIAL CONSIDERATIONS WHEN NEGOTIATING “GREEN” CONSTRUCTION CONTRACTS FOR THE HOSPITALITY SECTOR

There are many different circumstances to consider when parties negotiate construction contracts for the hotel sector. These include the type of work undertaken (e.g. new build; conversion, retrofit or renovation); market segmentation (e.g. budget vs luxury asset); and location (e.g. island resort, rural or city centre). The appetite and ability to invest CAPEX and the extent to which parties are willing to agree to ESG related obligations is also important. The opinions of other stakeholders including Debt Funders, Landlords, Tenants, Franchisors and Management Companies (if any) could also be relevant.

There may be planning and building regulation restrictions which hinder the implementation of environmental efficiency measures, as is the case with some heritage and listed buildings. However, in the race to achieve NZC, **there is no time for delay**. In the EEA’s opinion, every effort should be expended to consider the integration of ESG obligations into construction contracts, to mitigate climate and regulatory risk, and ensure that the hotel and its business do not become stranded or obsolete.



GREEN CONSTRUCTION COST

The inclusion of "green" clauses does not necessarily result in increased CAPEX costs when undertaking works to a hotel. Where it does, these need to be considered against potential operational cost savings such as reduced energy consumption and reduced rates from debt funders promoting ESG measures. Consideration should also be paid to who bears the cost of the proposed measures where different interested parties are all striving to "do the right thing".

For example, in a leased hotel, a Landlord may benefit from increased capital value of the asset and a Tenant may benefit from reduced operating costs. Similarly, a Management Company may benefit from reduced operating expenses thereby resulting in a higher management fee. In such circumstances it may be reasonable for the costs to be shared, even if not equally.



RELATIONSHIP ISSUES

For ESG to become an integral part of the development and operation of hospitality assets, it is crucial for the relevant stakeholders to have an open and fair dialogue, resulting in agreement on how to (re)develop a hospitality asset in line with measurable ESG targets, for the asset to be as environmentally efficient and enabled to be operated as socially responsibly as possible. Jones Lang LaSalle's (JLL) Agency and Capital Markets Teams recommend that this conversation should be taking place at the outset – when heads of terms are being discussed and negotiated.

The relationship between Landlords and Tenants; Management Companies and Hotel Owners; Franchisors and Franchisees etc. has typically been relatively adversarial and lacking in trust. For existing assets with historical agreements which were drafted over 10 years ago, ESG was not a primary consideration. Parties have come to realise that increased collaboration is needed to make progress in the identification and implementation of ESG related measures. The Committee urges stakeholders with older agreements, which do not deal with ESG matters, to review these and to collaborate to vary the terms of their agreements.

Especially in terms of new builds and conversions, the EEA encourages Contractors, Hotel Owners and all other stakeholders to collaborate to ensure that assets are developed to be as sustainable as possible, in the most cost-effective way to maximise asset value; reduce operational costs and most importantly, to ensure as minimal an impact as possible on the environment.



ENERGY PERFORMANCE CERTIFICATES (EPC) AND MEES

Since 1 April 2018, the Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 have set a minimum energy efficiency standard (MEES) of EPC E for the letting of private rented properties (including commercial property, such as hotels). This means that it is unlawful for Landlords to grant a new tenancy of commercial buildings with an EPC rating of 'F' or 'G' (the two lowest grades of energy efficiency). This applies to both new leases and renewals (unless an exemption applies, and the Landlord has registered that exemption).

From 1 April 2023, it will be unlawful for a Landlord to continue to let commercial property (unless an exemption applies and is validly registered). The Government also confirmed in the Energy White Paper that it intends to make it unlawful to continue to let commercial property with an EPC rating of below B by 2030.

THE PROPOSED FRAMEWORK SETS OUT A PHASED IMPLEMENTATION WITH THE INTRODUCTION OF COMPLIANCE WINDOWS AS FOLLOWS:

First Compliance Window: EPC C (2025-2027)

- **1 April 2025:** Landlords of all commercial rented buildings in scope of MEES must present a valid EPC
- **1 April 2027:** All commercial rented buildings must have improved the building to an EPC \geq C, or register a valid exemption

Second Compliance Window: EPC B (2028 – 2030)

- **1 April 2028:** Landlords of all commercial rented buildings in scope of MEES must present a valid EPC
- **1 April 2030:** All commercial rented buildings must have improved the building to an EPC \geq B, or register a valid exemption

This may be an incremental pathway, but Landlords should tread with caution because at each enforcement stage in 2027 and 2030, Landlords will need to demonstrate that the building has reached the highest EPC band that a cost-effective package of measures can deliver. In addition, the Government intends to introduce a requirement to obtain an EPC certificate for all commercial property (currently there is only a requirement to obtain an EPC if a Landlord is granting a new lease or selling a building or substantial works are being undertaken). In essence, this will involve submitting the current EPC to an online PRS compliance and exemptions database. This will trigger a clear time period within which Landlords will be expected to undertake improvements to reach the minimum EPC ratings.

The current consequences for breaches of MEES standards include penalties of 10% or 20% of the rateable value of the Property (capped at £50,000 – £150,000), with the possibility of enforcement action by the local authority being taken.

There has been much criticism of EPCs, due to the fact the assessments are based on standardised data and do not provide information on the actual, real life energy usage and performance of a building. There have also been complaints of inconsistent assessors and lack of regulation. The Government is currently considering all of these issues.

VIEWS FROM THE HOTEL SECTOR

Ultimately, the inclusion of ESG clauses within construction contracts for our sector requires open-dialogue, effective collaboration and cooperation between all stakeholders. This paper has been peer reviewed by leading individuals in the hospitality sector. A snapshot of their views is provided below:

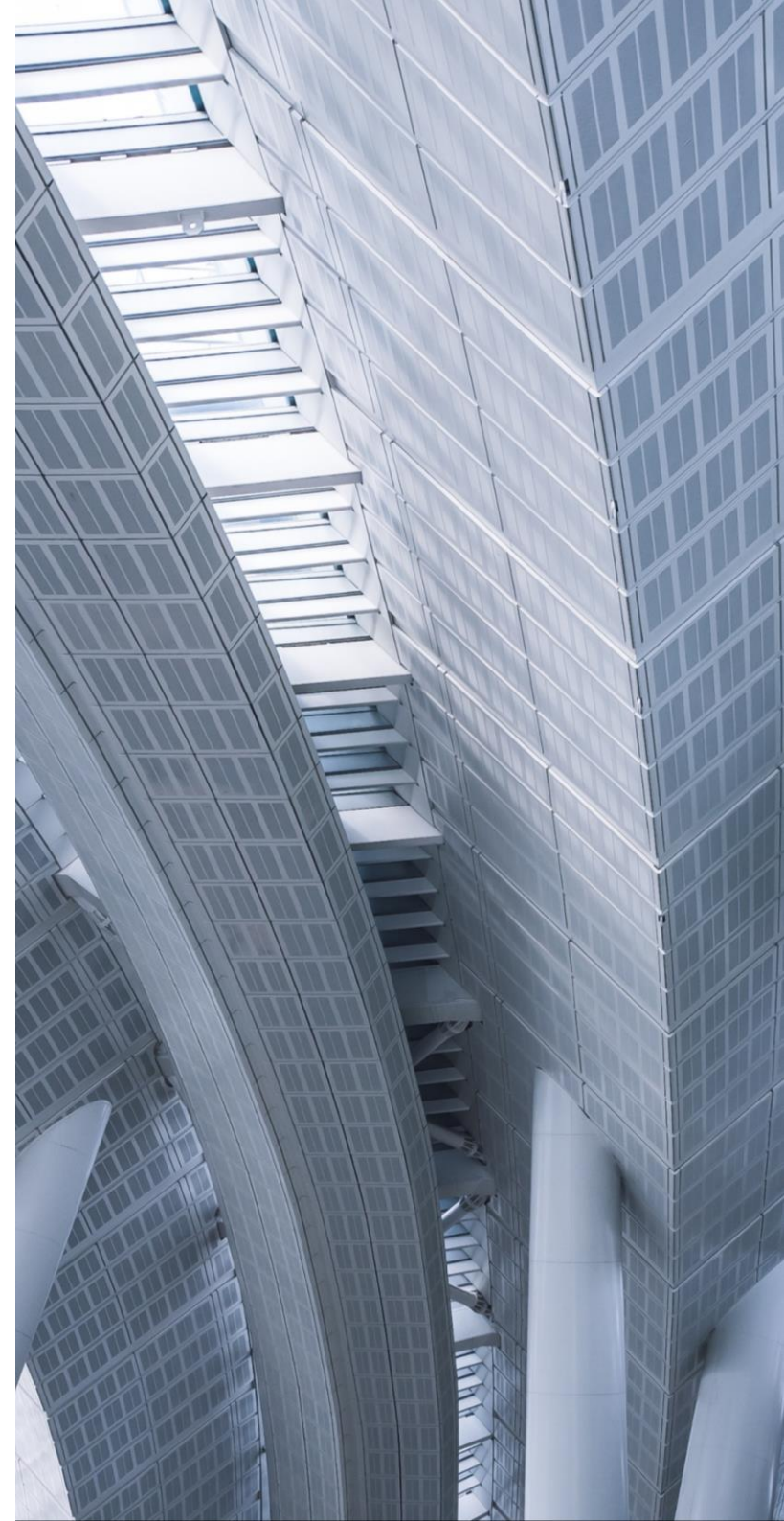
“It is fundamental to the success of projects that the strategic sustainability objectives are clearly defined and aligned with those of the investors, lenders and operators. The proposed building contract clauses optimise sustainable design, construction and improve the long-term operation of the asset as the industry moves towards net zero”

Tom Mackenzie, Senior Director, Arcadis

“We aim to play a leading role in the industry’s environmental progress by minimising our greenhouse gas emissions and working towards carbon neutrality”

Neil Short, Development Director, Stay City

The time to act is now.



PART TWO: SUMMARY OF GREEN CONSTRUCTION CLAUSES

This section of the report contains a summary of the model clauses for construction contracts in the hotels sector. The full clauses then follow in Part Three.

Whilst there is an element of aspirational drafting provided in Part 2, the Committee's ambition is to ensure that the clauses provided are both practical and commercially balanced. In other words, the clauses do not intend to result in any disproportionate increase in costs for any of the parties entering into the requisite contract. The clauses evidently need to be "road tested" in practice but with thoughtful planning, the Committee considers that incorporation of these clauses would help mitigate climate-related risk, ensure regulatory compliance, promote excellent standards of social responsibility and steer businesses in our sector to NZC in commercially viable ways.

The clauses are based upon versions of clauses from the TCLP website, tailored to the hospitality sector. A link to the TCLP website is here:

<https://chancerylaneproject.org/climate-clauses/>

Generally, it is envisaged that the clauses can be dropped into standard forms of construction contracts such as the Joint Contracts Tribunal (**JCT**) suite, or template forms of consultant appointments.

The majority of the model clauses are drafted to be included in a building contract. These clauses will require some adaptation to be appropriate for use in a consultant appointment.



SUMMARY OF THE CLAUSES

A: JCT ENERGY EFFICIENT AND ENVIRONMENTAL OBLIGATIONS (BASED ON MARY'S CLAUSE)

This clause seeks to introduce a general requirement for contractors to adopt energy efficiency and environmental considerations as obligations akin to Modern Slavery or Anti-Bribery requirements. The environmental requirements in this model clause are designed to steer development in an environmentally sustainable way. This includes a requirement that Engineering, Procurement & Construction (EPC) obligations are met before PC is certified, thereby ensuring that the building achieves an EPC "A" rating (or such other rating as specified by the contractor).

The full clause can be found at pages 15-20

B: GREEN PROJECT MODIFICATIONS (BASED ON LUNA'S CLAUSE)

This clause seeks to incentivise contractors to introduce green modifications to the design and development of a project. The approvals process set out in this model clause requires a change in the terms used to assess environmental and social impacts on programme, cost, and any requirements for third-party consents (such as planning).

The full clause can be found at pages 21-27.

C: NET ZERO CONSTRUCTION STANDARDS (BASED ON ESTELLE'S CLAUSE)

This clause seeks to introduce green amendments to the standard of care around best industry practice. These amendments cover each phase of the development process, from construction through to occupation and operation. The clause imposes obligations on the contractor to report on the attainment of the green objectives.

The full clause can be found at pages 28 - 35

D: CLIMATE RESILIENT LANDSCAPE DESIGN CONTRACTS (BASED ON EDGAR'S CLAUSE)

This clause is primarily aimed at Landscape Architect appointments. However, it can be incorporated into other consultant appointments and building contracts in a design & build context. It seeks to promote ecology and biodiversity considerations into landscaping of developments, as well as encouraging the return of native plants, trees, and wildlife.

The full clause can be found at pages 36 - 38

E: CONSTRUCTION MATERIALS: PROCUREMENT (BASED ON TRISTAN'S CLAUSE)

This seeks to place obligations on the Contractor to procure materials in the most sustainable way and by reference to the Carbon Budget. It requires the Contractor to provide a list of suppliers and manufacturers and the impacts of transportation of the same against the Carbon Budget and encourages them to use local materials where possible. Attainment of the Carbon Budget is measured by an independent Carbon Consultant (similar in role to an Employer's Agent). The clause is drafted on a pain / gain basis by liquidated damages and a bonus payment if the Carbon Budget is achieved / not achieved.

The full clause can be found at pages 39 - 47

A podcast explaining the clause can also be found here: <https://chancerylaneproject.org/updates/episode-2-of-our-in-house-podcast-is-now-available/>

SUMMARY OF THE CLAUSES (CONT'D)

F: CLIMATE ALIGNED CONSTRUCTION WASTE MANAGEMENT (BASED ON FRANCIS' CLAUSE)

Linked to Tristan's clause, this clause deals with the disposal of construction waste, particularly the minimisation of waste sent to landfill. It also encourages recycling and reusing resources wherever possible.

The full clause can be found at pages 48 - 49

H: GREEN INCENTIVE BONUS (BASED ON ASHKAN'S CLAUSE)

The clause seeks to drive engagement with existing industry standards and requires the parties to agree to clear, specific practices from the outset that result in energy savings or other positive environmental impacts throughout the build phase.

The full clause can be found at pages 70 - 77

G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

This clause takes sustainable practices and net zero aligned provisions and adapts them for MMC contracts. It allows contracting parties to embed their vision of sustainability through the use of MMC into contracts, while also achieving the cost and efficiency benefits MMC offers.

The full clause can be found at pages 50 - 69

I: SUBCONTRACTOR / SUPPLIER SELF-ASSESSMENT CLIMATE QUESTIONNAIRE (BASED ON ROBYN'S QUESTIONNAIRE)

This questionnaire promotes positive change to achieve climate ambitions across supply chains and in procurement. It will enable organisations to set and publish expectations of their subcontractors/suppliers, which will also help investors and other relevant stakeholders to understand the organisation's stance on climate change issues.

The Committee considers that the questionnaire is generic enough to be used "as is" and does not need any modification to be used for our sector. The guidance notes for the questionnaire can be found at pages 78 - 79



PART THREE: GREEN CONSTRUCTION CLAUSES

This section of the report sets out the content of the model clauses for construction contracts in the hotels sector. TCLP named the clauses after children important to those involved in the drafting of the clauses, to remind readers of the impact these clauses can have on future generations.

We have noted in this document which TCLP clause the model clause is based on by reference to the names of key individuals that the TCLP is inspired by.



A: JCT ENERGY EFFICIENCY AND ENVIRONMENTAL OBLIGATIONS (BASED ON MARY'S CLAUSE)



A: JCT ENERGY EFFICIENCY AND ENVIRONMENTAL OBLIGATIONS (BASED ON MARY'S CLAUSE)

1. JOINT CONTRACTS TRIBUNAL (JCT) CONTRACT PARTICULARS: INCORPORATION INTO THIS AGREEMENT

1.1 The Parties have completed the JCT Contract Particulars in the JCT Design and Build Contract, 2016 edition attached at Annex A. The JCT Contract Particulars shall take effect in this agreement, as completed by the Parties, subject to these amendments.

1.2 ADDITIONAL DEFINITIONS

Add these definitions:

Environmental Requirements means:

- a) the protection of the environment (including the prevention of atmospheric and other pollution and the protection of wildlife and wildlife habitats)
- b) sustainable construction and development and
- c) energy efficiency, in particular by using all reasonable endeavours to fulfil the environmental and sustainability objectives listed in Annex [A]

EPC Obligation the specific obligation imposed in the Employer's Requirements requiring the Contractor to achieve an EPC "A" rating in respect of [certain parts of] the Works [as identified therein]. **[Drafting note: consider referencing other certifications such as BREEAM, whilst always keeping in mind the MEES which will cover most commercial tenancies from April 2023, as summarised in Part 1.]**

A: JCT ENERGY EFFICIENCY AND ENVIRONMENTAL OBLIGATIONS (BASED ON MARY'S CLAUSE)

2 COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

2.1 Add a new sub-clause:

"In performing his obligations under this Contract, the Contractor shall and shall ensure that each of its sub-contractors shall:

2.1.1 comply with the Modern Slavery Act 2015 and the Anti-Slavery Policy

2.1.2 comply with the Anti-Bribery Policy; and

2.1.3 at all times in carrying out its obligations under this agreement, the Contractor shall seek to [promote] the Environmental Requirements."

[Drafting note: Alternatively, the Environmental Requirement could be included in the Standards / Compliance with Law obligations.]

2.2 Add a new sub-clause:

"Without derogating from any other provision in this Contract, the Contractor warrants to the Employer that it shall use the ***[Drafting note: link to Standard of Care clause in contract]*** when:

2.2.1 designing the Carbon Disclosure Project (CDP) Works

2.2.2 selecting goods, materials, plant, and equipment for incorporation in the CDP Works; and

2.2.3 complying with the obligation in clause 2.1.3 in respect of the Environmental Requirements."

A: JCT ENERGY EFFICIENCY AND ENVIRONMENTAL OBLIGATIONS (BASED ON MARY'S CLAUSE)

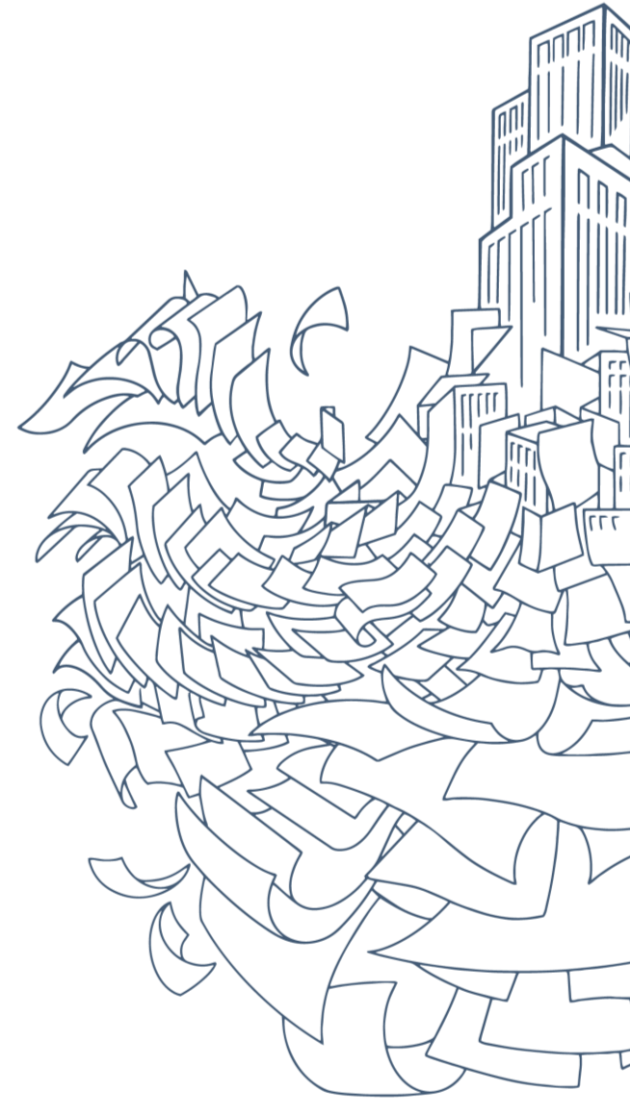
3 EPC OBLIGATION

3.1 Add a new clause:

"For the purpose of assessing whether practical completion of the Section or the Works has been achieved, the [Employer / Employer's Agent / Architect / Contract Administrator] shall not issue any certificate to that effect until such time as the EPC Obligation for such Section or the Works as the case may be has been met or alternatively specific agreement has been reached between the Employer and the Contractor for the urgent achievement of the EPC Obligation during the course of the Rectification Period (which may include the Employer requiring the Contractor to undertake remedial works (such remedial works to include, but not limited to, retrofitting as necessary) to achieve the EPC Obligation or (if not possible) improve the energy performance of the Works, [provided that the total aggregate costs (excluding VAT) of such remedial works (which shall be borne by the Contractor) do not exceed [10]% of the Contract Sum]."

3.2 Add to the end of clauses 2.32 and 2.36, before the full stop:

"Provided that the [Employer / Employer's Agent / Architect / Contract Administrator] shall not be required to issue any Certificate of Making Good earlier than the expiry of the Rectification Period and / or prior to the EPC Obligation for such Section or the Works as the case may be having been met."

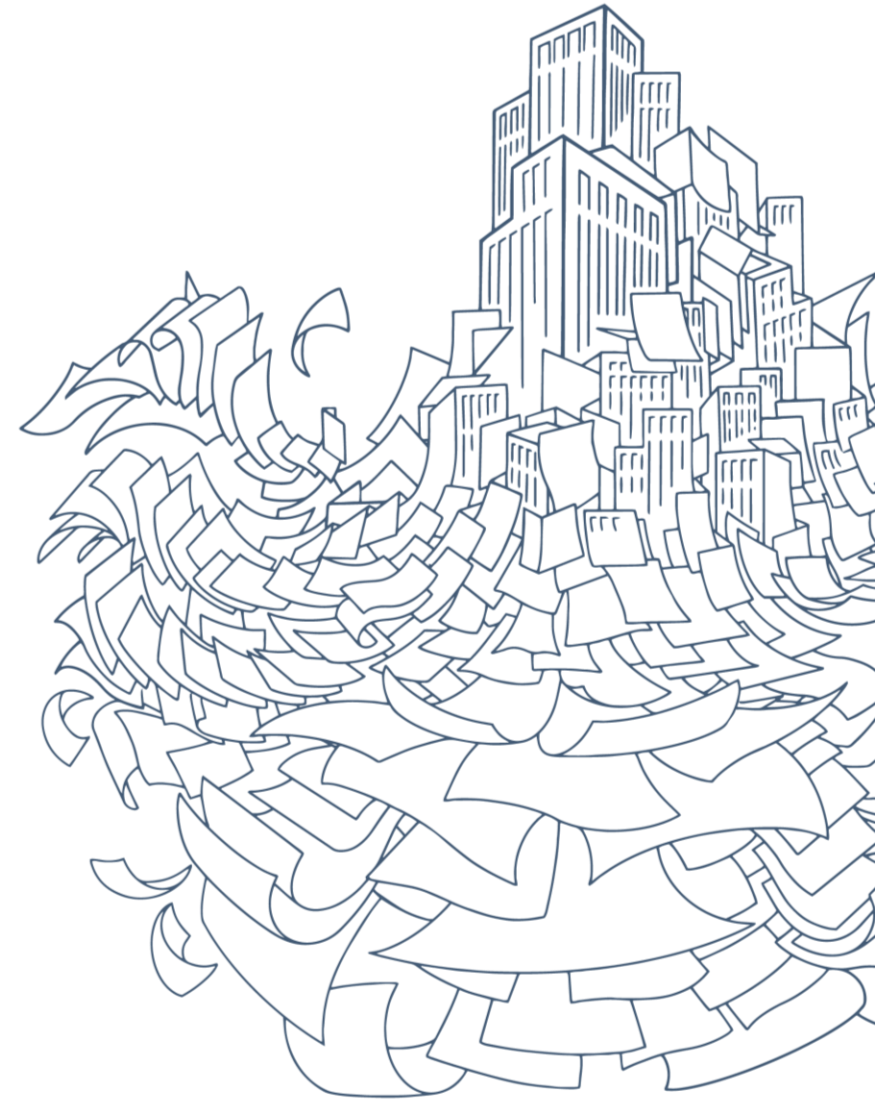


A: JCT ENERGY EFFICIENCY AND ENVIRONMENTAL OBLIGATIONS (BASED ON MARY'S CLAUSE)

3.3 Add a new clause after clause 2.36:

"Snagging list and defects, shrinkages or other faults remaining at practical completion Clauses 2.35 and 2.36 shall apply, all other things being equal, to:

- a) any items identified on any snagging list issued by the Architect / Contract Administrator at or around practical completion or attached to a Practical Completion Certificate or Section Completion Certificate;
- b) any defects, shrinkages or other faults in the Works at practical completion; and,
- c) any incomplete work, forming part of the Works, remaining at practical completion including but not limited to any work required for the purpose of achieving the EPC Obligation."



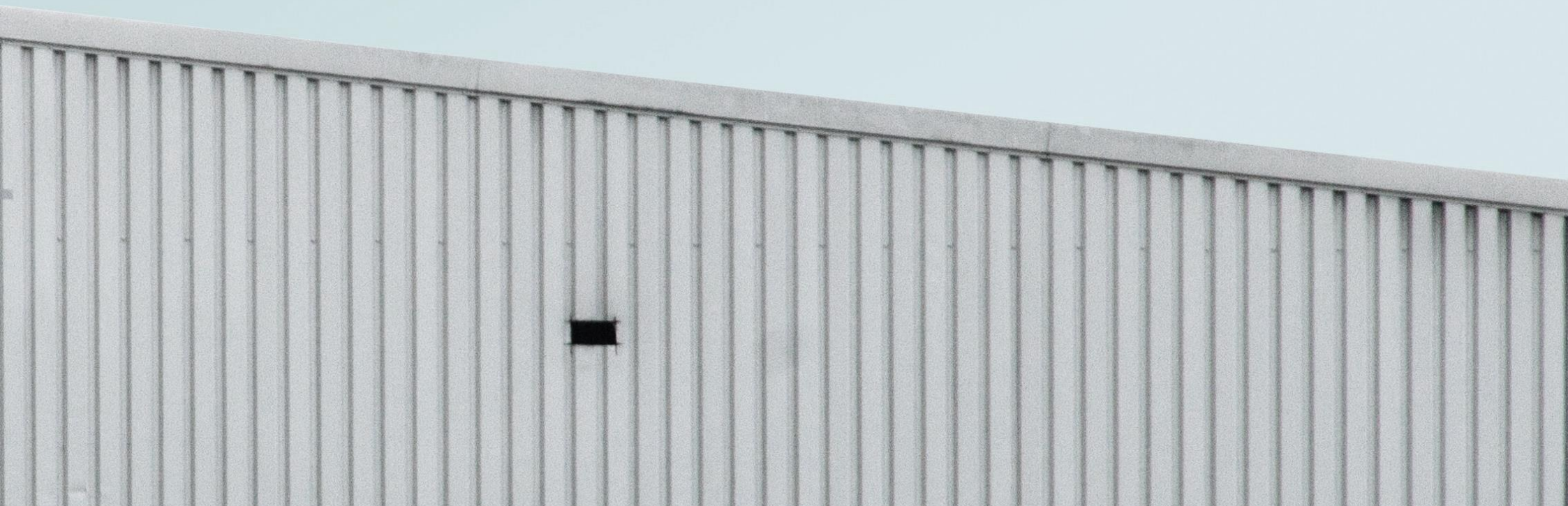
A: JCT ENERGY EFFICIENCY AND ENVIRONMENTAL OBLIGATIONS (BASED ON MARY'S CLAUSE)

ANNEX A ENVIRONMENTAL REQUIREMENTS – OBJECTIVES *[Drafting note: to be updated by reference to Employer's Requirements and empirical data]*

- 1 To use []% of sustainable materials and avoid the use of environmentally harmful materials
- 2 To re-use and recycle materials on site in accordance with *[Drafting note: link to Francis' clause]*
- 3 To employ a site waste management plan which includes zero-to-landfill and a process to minimise waste as far as possible
- 4 To adopt environmentally friendly working methods, including minimising energy use through plant and site services
- 5 To protect and enhance existing ecological features on site in accordance with *[Drafting note: link to Edgar's clause]*
- 6 To minimise air (dust and fumes) and noise pollution
- 7 To minimise water use and guard against water pollution
- 8 To utilise local suppliers in accordance with *[Drafting note: link to Tristan's clause]*; and
- 9 To promote green travel to and from the site



B: GREEN PROJECT MODIFICATIONS (BASED ON LUNA'S CLAUSE)



B: GREEN PROJECT MODIFICATIONS (BASED ON LUNA'S CLAUSE)

1 ADDITIONAL DEFINITIONS

Carbon Footprint means the total annual Scope 1, 2 and 3 Emissions relating to the Project

Carbon Footprint Standards means:

(a) for organisational Carbon Footprints and supply chain Carbon Footprints, the GHG Protocol Corporate Accounting and Reporting Standard[, or ISO 14064]; and

(b) for product Carbon Footprints, the GHG Protocol Product Life Cycle Accounting and Reporting Standard[, or ISO 14064].



Green Modification means a change to the requirements of the deed or the Works which:

- a) increases the resilience of the completed Project to the impacts of climate change (including gradual onset and extreme weather events)
- b) improves the energy efficiency of the completed Project from the existing obligations in the deed (including through a design change or change to construction materials)
- c) increases protection of the natural environment by:
 - i. increasing protection of, or enhancing, existing ecological features on the site
 - ii. increasing protection of wildlife and wildlife habitats on or impacted by the site or the Project
- d) increases the utilisation of local suppliers
- e) increases green travel to and from the site
- f) otherwise assists the Employer in meeting the Green Objectives

B: GREEN PROJECT MODIFICATIONS (BASED ON LUNA'S CLAUSE)

2. **Green Objectives** means the following shared objectives:

- a) to carry out the Project responsibly, sustainably, ethically and in accordance with all applicable laws and good business practice
- b) in relation to the construction phase and the undertaking of the construction activities
 - i. maximising
 - a) the use of sustainable materials
 - b) the use of materials which result in lower emissions of greenhouse gasses throughout the supply chain and
 - c) the protection of the natural environment
 - ii. minimising:
 - a) emissions of greenhouse gases
 - b) the use of environmentally harmful materials
 - c) the use of water
 - d) the generation of waste and
 - e) the generation, emission or transmission of pollution (without diminishing any obligation to avoid pollution in particular circumstances)



B: GREEN PROJECT MODIFICATIONS (BASED ON LUNA'S CLAUSE)

- c) in relation to the Employer's circumstances:
 - i. maximising the prospect of achieving the Employer's Net Zero target
 - ii. ensuring, insofar as is relevant to the matters the subject of this definition, that the terms of [the Employer's sustainability linked loan / terms of the Green Loan] are complied with and satisfied
 - iii. [the achievement of or improvement to the achievement of sustainability performance targets of the Employer's sustainability linked loan]
 - iv. [the improvement of the Project's performance under the terms of the [Employer's Green Loan]] and
 - v. [the prevention of a default under the terms of the Employer's Green Loan] or
- d) in relation to the occupation, operation and utilisation of the Project during its operating life:
 - i. minimising greenhouse gas emissions;
 - ii. maximising energy efficiency; and
 - iii. maximising resilience to the impacts of climate change in a concentration pathway RCP8.5 future or other runaway climate change scenario



B: GREEN PROJECT MODIFICATIONS (BASED ON LUNA'S CLAUSE)



1 CONTRACTOR'S GREEN OBLIGATIONS

- 1.1 The Contractor must, to the extent that is reasonably practicable in the circumstances, undertake its obligations under the deed in a manner which maximises the prospect of achieving the Green Objectives.
- 1.2 The Contractor shall procure that its sub-contractors shall have due regard to achieving the Green Objectives.

2 GREEN MODIFICATION

2.1 Green Objective Direction

- a) The Employer may direct the Contractor to perform a Green Modification to the Works by giving a written direction to the Contractor setting out the reasons for the Green Modification (**Green Objective Direction**). The Employer's Green Direction may include, but is not limited to, a recent development in climate science in the design or construction of the Works or may reflect an increased net zero ambition of the Employer
- b) the Contractor must, within [20] business days of receiving a Net Zero Direction under clause [2.1], submit a written notice to the Employer setting out each of the items in clause [2.2(c) to 2.2(h)]

2.2 Green Modification request by Contractor

The Contractor may propose a Green Modification to the Works by giving a written notice to the Employer and [Employer's Agent/Contract Administrator], setting out:

- a) the proposed Green Modification
- b) the reason for the proposed Green Modification, including how the Green Modification will assist in delivering to the Green Objectives or, alternatively, how the Net Zero Modification will improve the Carbon Footprint of the Project.
- c) the time within, and the manner in which, the Contractor proposes to implement the proposed Green Modification
- d) the effect the proposed Green Modification will have on the construction programme (including any extension of time required to the Date for Practical Completion)
- e) any Approvals required to implement the proposed Green Modification, and the effect of the proposed Green Modification on any existing Approvals
- f) the effect the proposed Green Modification will have on the Contractor's ability to satisfy its obligations under the contract.

B: GREEN PROJECT MODIFICATIONS (BASED ON LUNA'S CLAUSE)

- (g) the cost impacts to the Employer arising from the Green Modification, including but not limited to:
 - (i) cost savings or increases to the Contract Sum;
 - (ii) costs savings to the ongoing operations and maintenance of the completed Project (including reduced energy costs arising from the Green Modification)
 - (iii) reduced [costs of greenhouse gas emissions obligations / carbon price etc]
 - (iv) reduced financing costs of the Project; and
 - h) any other relevant information reasonably required by the Employer to assess the proposed Green Modification, (**Green Modification Notice**).
- b) rejects the proposed Green Modification (either in whole or part), acting reasonably and setting out reasons, in which case clause 2.4 will apply to those rejected parts; or
- c) requests further information from the Contractor to enable the Employer to properly assess the Proposed Green Modification or any part of the Green Modification which has not been approved or rejected.

2.3 Employer's Green Modification response

Within [20] business days of receipt of a Green Modification Notice, the Employer must issue a notice to the Contractor which:

- a) approves the proposed Green Modification (either in whole or part), in which case clause 2.5 will apply to those approved parts



B: GREEN PROJECT MODIFICATIONS (BASED ON LUNA'S CLAUSE)

2.4 Rejected Green Modification

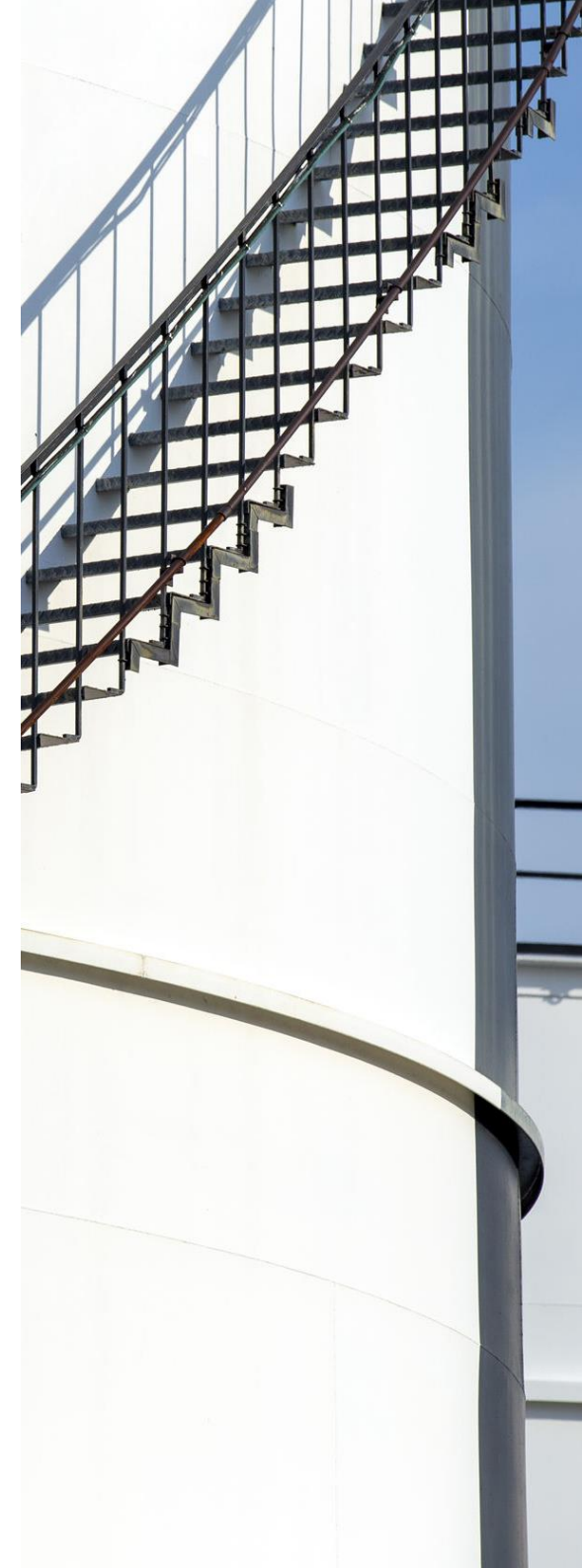
The Employer can only reject the Net Zero Modification Proposal on one or more of the following grounds

- (a) a delay to the completion of the Works arising from the Green Modification would be material having regard to the overall objectives of the Works and the Green Objectives; or
- (b) the cost of implementing the Green Modification would increase the cost of implementing the Green Modification would increase the cost of carrying out the Works by more than []% of the Contract Sum; or
- (c) the Green Modification would adversely affect the quality of the Works (including by reducing the value and/or useful life of the Works) or adversely affect the operation or maintenance of the Works; or
- (d) the Green Modification does not comply with applicable legislation

2.5 Approved Green Modification

If the Employer has approved the Net Zero Modification Proposal pursuant to clause 2.3(a) or 2.3(c):

- (a) the Employer's Agent must within [10] business days of the approval, issue a notice to the Contractor that sets out:
 - i. where the Green Modification results in an increase to the Contractor's design or construction costs, the revised Contract Sum valued as a variation in accordance with clause [●] (but not exceeding the amount nominated pursuant to clause 2.2.(g)(i); and
 - ii. any extension of time required to the Date for Practical Completion (but not exceeding the duration of the extension of time nominated pursuant to clause 2.2(d);
- (b) the Contractor must proceed with implementing the approved Green Modification



C: NET ZERO CONSTRUCTION STANDARDS (BASED ON ESTELLE'S CLAUSE)



C: NET ZERO CONSTRUCTION STANDARDS (BASED ON ESTELLE'S CLAUSE)

ADDITIONAL RECITALS

- A. The parties [have signed up to the [Race to Zero](#) and] acknowledge their common intention to:
- 1) achieve their respective Net Zero Targets; and
 - 2) align with the objectives of the UNFCCC's Paris Agreement, in particular pursuing efforts to limit global temperature increase to 1.5 degrees Celsius above pre-industrial levels and achieve net zero or net negative emissions by 2050 or sooner.
- B. The parties agree to pursue (A) in a manner that promotes a just transition to a low carbon economy and results in at least a 7% reduction of greenhouse gas emissions year on year.



C: NET ZERO CONSTRUCTION STANDARDS (BASED ON ESTELLE'S CLAUSE)

ADDITIONAL DEFINITIONS

Best Industry Practice means design, supply, construction, delivery to site, installation, commissioning, remedy and repair practices which are carried out:

- a) with the standard of skill, care and diligence which may reasonably be expected of a skilled and experienced professional
- b) in a manner that is Paris Aligned
- c) in a manner that considers how wider local and global stakeholders are affected by both climate risk and the transition to a low carbon economy and how the Contractor can improve their resilience throughout the delivery of the Contractor's activities
- d) in a manner that complies with applicable law, safety regulations (including fire safety regulations, building regulations and standards), environmental protection and good practice guidance
- e) with adequate levels of resources; and
- f) to meet and achieve the Net Zero Objectives.

Net Zero Target means a target to reduce and remove GHG Emissions, including by offsetting Residual Emissions, to achieve a balance between the Party's sources and sinks of GHGs. This must be achieved by [2050/ Insert earlier date] and align with the goals of the Paris Agreement.

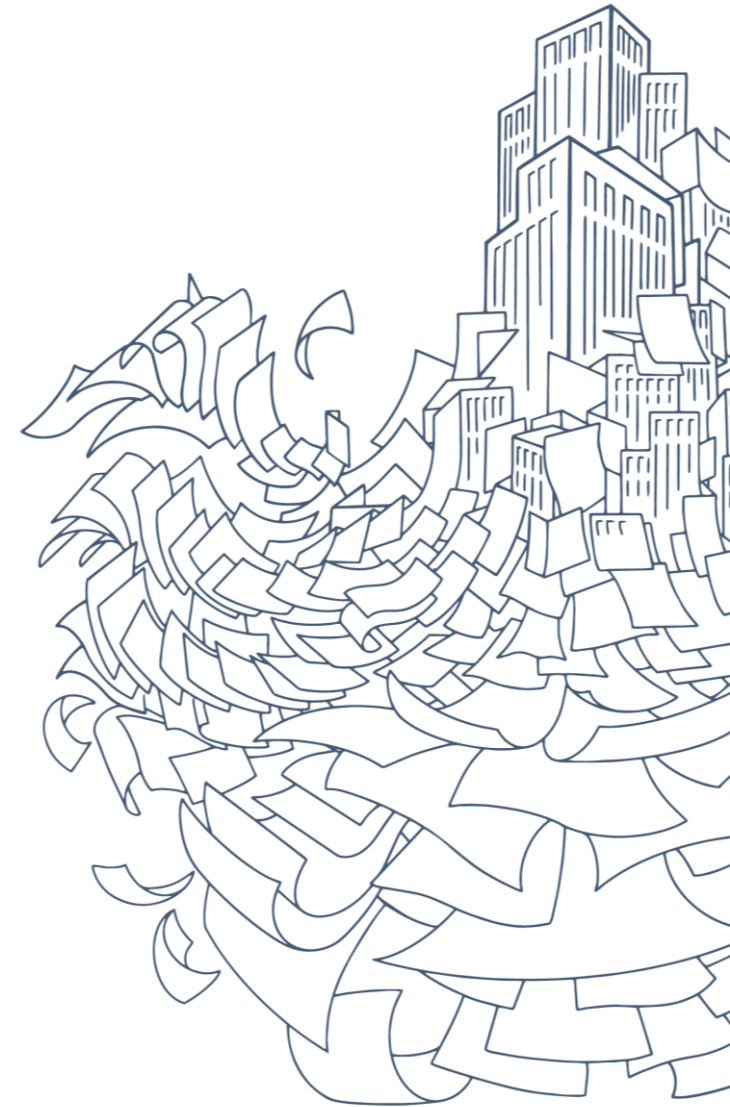
Scope 1, 2 and 3 Emissions means the three classifications of emissions in the [GHG Protocol](#).



C: NET ZERO CONSTRUCTION STANDARDS (BASED ON ESTELLE'S CLAUSE)

Green Objectives means the following shared objectives:

- b) to carry out the Works responsibly, sustainably, ethically and in accordance with all applicable laws and good business practice
- c) in relation to the construction phase and the undertaking of the construction activities, using all reasonable endeavours to:
 - i. maximise
 - a) the use of sustainable materials
 - b) the use of materials which result in lower Stage 1, 2 and 3 Emissions
 - c) the protection of the natural environment
 - ii. minimise:
 - a) emissions of greenhouse gases
 - b) the use of environmentally harmful materials
 - c) the use of water
 - d) the generation of waste and
 - e) the generation, emission or transmission of pollution (without diminishing any obligation to avoid pollution in particular circumstances)



C: NET ZERO CONSTRUCTION STANDARDS (BASED ON ESTELLE'S CLAUSE)

- c) in relation to the Employer's circumstances, using all reasonable endeavours to: *[Drafting Note: may be inserted into technical documents]*
- i. maximise the prospect of achieving the Employer's Net Zero target
 - ii. ensure, insofar as is relevant to the matters the subject of this definition, that the terms of [the Employer's sustainability linked loan / terms of the Green Loan] are complied with and satisfied
 - iii. [the achievement of or improvement to the achievement of sustainability performance targets of the Employer's sustainability linked loan]
 - iv. improve the Project's performance under the terms of the [Employer's Green Loan]
 - v. [the prevention of a default under the terms of the Employer's Green Loan]
 - vi. Developer and tenant agree to continue dialogue with best endeavours to achieve Net Zero Carbon and to limit the reliance on carbon offsets. Examples of such measures include for example substitution of gas boilers with substitutes that improve the sustainability, energy efficiency and performance of the building
 - vii. Certifications to target BREEAM outstanding, EPC rating A, Edge rating <https://edgebuildings.com/building-types/hospitality/> and / or WELL rating of gold or platinum (highest)
 - viii. Developer to provide final EPC rating within 60 days of Practical Completion [NM: I think this is quite standard? Should we move it to the standard provisions above?]
 - viii. X% of waste to be diverted from landfill disposal. Note Do No Significant Harm criteria of the EU Taxonomy targets at least 80% of non-hazardous and demolition waste generated on the construction site must be prepared for re-use or sent for recycling or other material recovery, including backfilling operations that use waste to substitute other materials.
 - ix. In alignment with EU taxonomy, ensure building components and materials do not contain asbestos not substances of very high concern (refer to Authorisation List of the REACH regulation <https://www.hse.gov.uk/reach/authorisation-list.htm>)

C: NET ZERO CONSTRUCTION STANDARDS (BASED ON ESTELLE'S CLAUSE)

- d) in relation to the occupation, operation and utilisation of the Project during its operating life using all reasonable endeavours to:
 - i. minimising greenhouse gas emissions
 - ii. maximising energy efficiency
 - iii. future or other runaway climate change scenario



C: NET ZERO CONSTRUCTION STANDARDS (BASED ON ESTELLE'S CLAUSE)

2 Operative terms

1 Contractor's obligations

1.1 The Contractor must carry out all of its obligations under the Contract in accordance with:

1.1.1 the Contract Documents

1.1.2 all applicable laws and standards; and

1.1.3 Best Industry Practice.

- b) The Contractor warrants that, subject to using Best Industry Practice, the Project will achieve Green Objectives on Practical Completion and during its [operating life].
[Drafting note: consider whether the Contractor should be liable for the asset achieving the Green Objectives into the future, as this is potentially a very onerous obligation on current drafting.]

C: NET ZERO CONSTRUCTION STANDARDS (BASED ON ESTELLE'S CLAUSE)

2 Net Zero Targets

2.1 The Employer and the Contractor each warrant that:

2.1.1 they have a Net Zero Target; and

2.1.2 the delivery of the Project is consistent with their respective Net Zero Target.

2.2 The Contractor must ensure that each subcontract includes equivalent provisions to clauses 1, 2.1 and [*insert all other clauses that should be cascaded into subcontracts*].

3 Net Zero Objectives Reporting

3.1 The Contractor must provide to the Employer a report on the last day of each [quarter/ month – *insert appropriate time frame*] that describes conduct or actions taken to satisfy the Net Zero Objectives (the **Net Zero Report**).

3.2 The Employer must notify the Contractor within [10 Business Days] of receiving the Net Zero Report if the Employer:

3.2.1 accepts the Net Zero Report; or

3.2.2 considers that the Contractor is not meeting the Net Zero Objectives, setting out reasons.

3.3 If the Employer issues a notice under clause 3.2.2., the Contractor must promptly:

3.3.1 prepare a rectification plan to the satisfaction of the Employer, detailing how it plans to correct any failure to achieve the Net Zero Objectives set out in the notice or otherwise (including any temporary Offsetting required to realign the Contractor's activities with the Net Zero Objectives); and

3.3.2 comply with the requirements set out in that notice and the rectification plan, and within [20 Business Days] notify the Employer of the rectification measures that have been implemented.

3.4 If the Contractor does not comply with clause 3.3, this will be deemed a [substantial breach of the Contract] and [*link to termination clause*] will apply

D: CLIMATE RESILIENT LANDSCAPE DESIGN CONTRACTS (BASED ON EDGAR'S CLAUSE)



D: CLIMATE RESILIENT LANDSCAPE DESIGN CONTRACTS (BASED ON EDGAR'S CLAUSE)

1 ADDITIONAL DEFINITIONS

- 1 **Biodiversity Gain** means the measurable gain in the biodiversity value between pre-development and post-development that is attributable to the development, being the total of:
 - a) the post-development biodiversity value of the onsite habitat
 - b) the biodiversity value, in relation to the development, of any registered offsite biodiversity gain allocated to the development and
 - c) the biodiversity value of any biodiversity credits purchased for the development
- 2 **Development** means [define development projects]
- 3 **Hard Landscaping** means the built components of a landscape such as paving, decking, paths and walls and does not include vegetation or water zones
- 4 **Landscaped Area** means the area[s] bounded in [red] shown on drawing reference ♦ at appendix ♦
- 5 **Native Flora** means those species of flora that have arrived and inhabited the United Kingdom naturally, without deliberate assistance from humans, since the last ice age and includes Native Trees
- 6 **Native Trees** means those species of trees that are native to the United Kingdom since the last ice age and listed as such on the Forestry Commission Website
- 7 **Professionals** means all consultants, [the Contractor and other persons appointed or to be appointed by the Developer, in addition to the Consultant,] that provide professional services in relation to the Development (whether such Professionals are novated to the Contractor or otherwise)

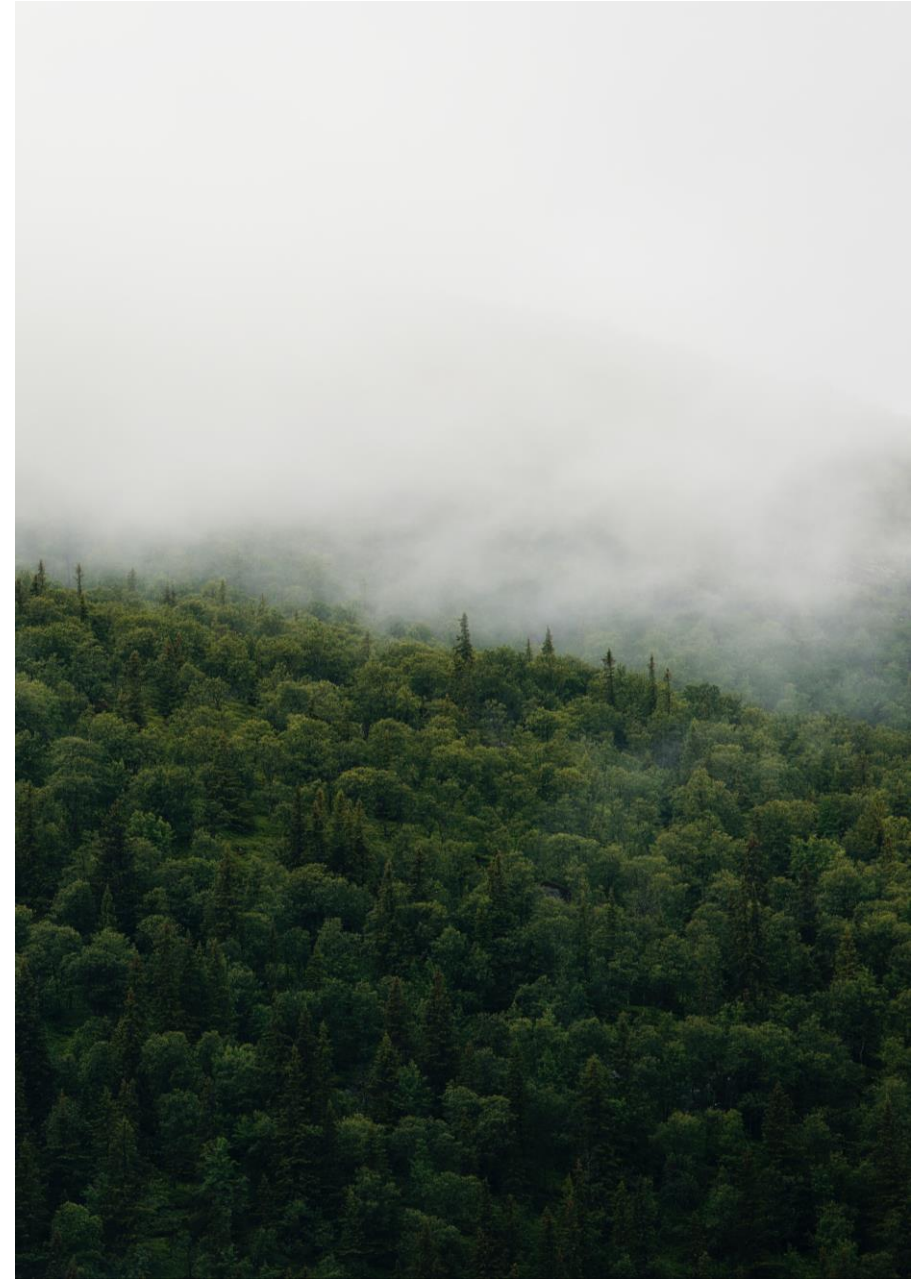


D: CLIMATE RESILIENT LANDSCAPE DESIGN CONTRACTS (BASED ON EDGAR'S CLAUSE)

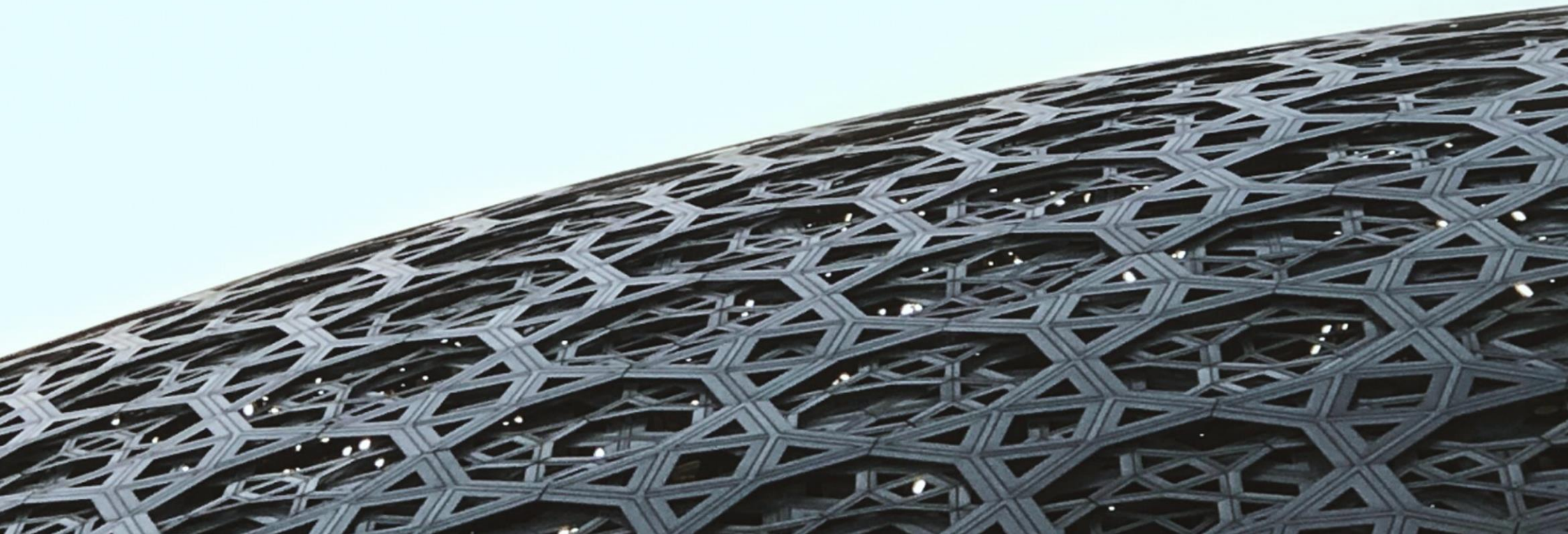
2 ADDITIONAL CLAUSES

2.1 Design

- a) The Consultant shall ensure that in the design of the Landscaped Area:
 - i. [a minimum of ♦% of the Landscaped Area shall consist of Native Flora [typical of ♦ habitat]]
 - ii. [only Native Trees are specified for use]
 - iii. [a maximum of ♦% of the Landscaped Area consists of Hard Landscaping]
 - iv. [habitats for ♦ species are [maintained][enhanced] as set out in the ♦ [Ecology Report dated t]]; and
 - v. [insert any additional planning conditions or site-specific landscaping conditions relating to environmental management].
- b) The Consultant shall collaborate with the other Professionals to see that the Development achieves a Biodiversity Gain of [10]% which will be maintained for at least [30] years after the Development is completed.



E: CONSTRUCTION MATERIALS: PROCUREMENT (BASED ON TRISTAN'S CLAUSE)



E: CONSTRUCTION MATERIALS: PROCUREMENT (BASED ON TRISTAN'S CLAUSE)

1 ADDITIONAL DEFINITIONS

- 1 **Carbon Budget** means the aggregate of [value] tonnes of Carbon Dioxide Equivalent of Greenhouse Gas Emissions permitted for all activities associated with the construction of the Works as set out in Appendix [X] and itemised per activity.
- 2 **Carbon Bonus** means the bonus which may be payable in accordance with clause 2.1A.6.2 which is to be an amount that is the percentage by which the Final GHG Emissions have bettered the target set out in the Carbon Budget (as set out in the Carbon Bonus Certificate) multiplied by [0.2%] multiplied by the equivalent percentage of the Contract Sum, PROVIDED THAT the percentage shall be no more than [10]% of the Contract Sum. ***Drafting Note: This is a commercial call for the parties and is provided as an example only. For an incentive consider providing for ratcheting up % for different % savings under the GHG Emissions.***
- 3 **Carbon Bonus Certificate** means the certificate which may be issued by the Carbon Consultant in accordance with clause 2.1A.6.1 setting out:
 - a) the Final GHG Emissions and
 - b) the percentage by which the Final GHG Emissions have bettered the target set out in the Carbon Budget
- 4 **Carbon Budget Report** means the report to be issued by the Carbon Consultant in accordance with clause 2.1A.4
- 5 **Carbon Consultant** means the carbon consultant appointed by the Employer to assess the Carbon Budget and the Works compliance with the Carbon Budget
- 6 **Carbon Offsetting** means the purchase of a quantity of carbon credits equal to the amount of the Residual Emissions from the Works that has been verified in accordance with [insert name of voluntary standard]

E: CONSTRUCTION MATERIALS: PROCUREMENT (BASED ON TRISTAN'S CLAUSE)

- 7 **Carbon Dioxide Equivalent (CO₂e or CO₂eq)** means the standard metric measure to compare the global warming potential of various Greenhouse Gases (GHGs) over a specified timescale
- 8 **Final Carbon Budget Report** means the final Carbon Budget Report confirming the Final GHG Emissions to be issued by the Carbon Consultant following the inspection in accordance with clause 2.1A.5
- 9 **Final Carbon Budget Report** means the final Carbon Budget Report confirming the Final GHG Emissions to be issued by the Carbon Consultant following the inspection in accordance with clause 2.1A.5
- 10 **Greenhouse Gases ("GHG" or "GHGs")** means the natural and anthropogenic gases which trap thermal radiation in the earth's atmosphere and as specified in Annex A to the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) or otherwise specified by the UNFCCC, and which currently include: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆), and nitrogen trifluoride (NF₃)
- 10 **Greenhouse Gas Emissions ("GHG Emissions")** means emissions of GHGs [related to the Works] categorised as scope 1, 2, and 3 emissions by *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition 2015 as updated periodically*.

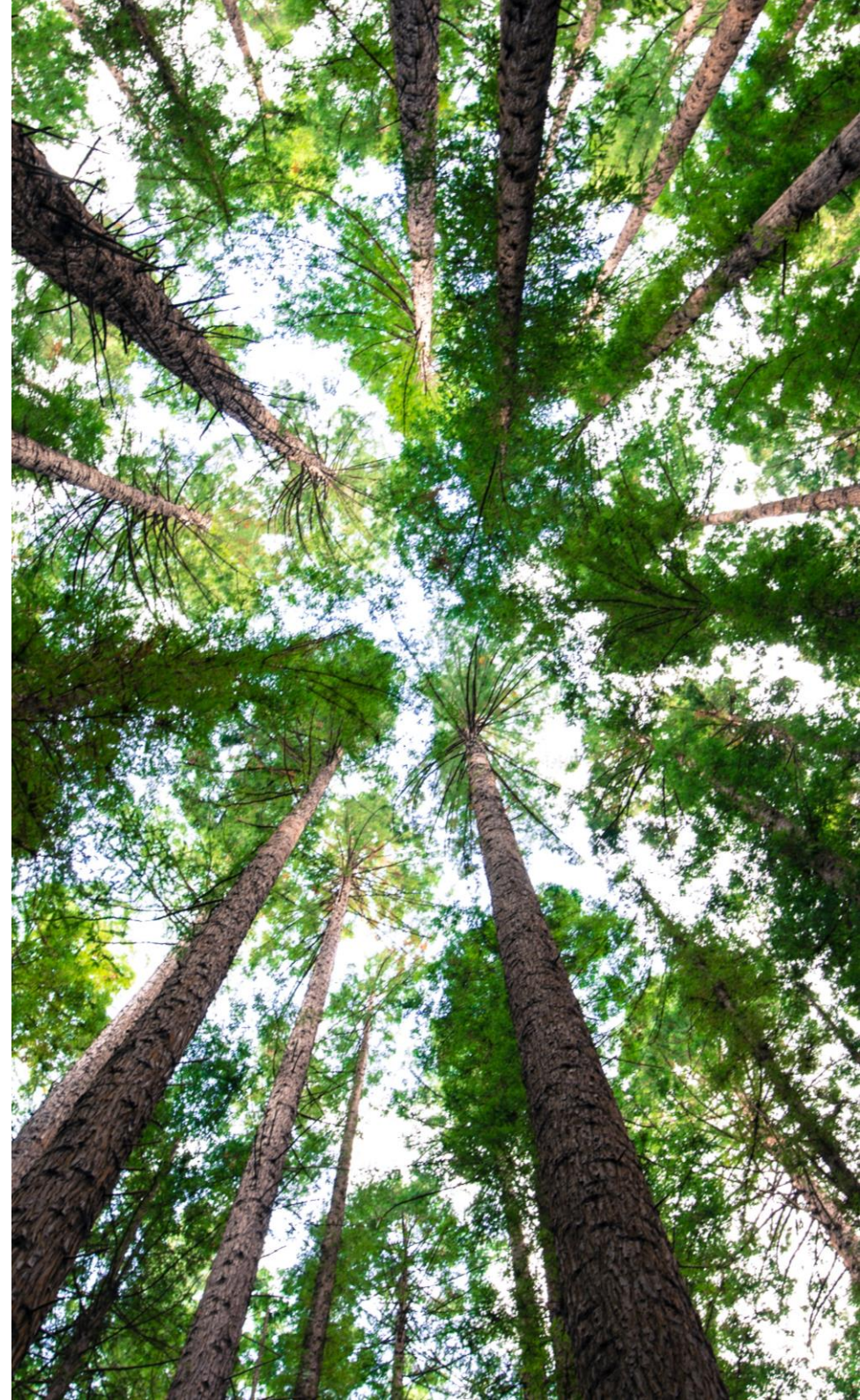


E: CONSTRUCTION MATERIALS: PROCUREMENT (BASED ON TRISTAN'S CLAUSE)

11

Prohibited Materials means any material, substance, product, process, technique or combination of the same which, by its nature or application:

- a) contravenes any British Standard or EU equivalent;
- b) contravenes the recommendations of the British Council for Offices' publication Good Practice in the Selection of Construction Materials (2011) (as may be amended or updated from time to time);
- c) would unnecessarily increase the total GHG Emissions of the Works because their embodied GHG Emissions cannot be reduced by Carbon Offsetting; or there is an alternative material or good which meets the standards of the Contract with fewer embodied GHG Emissions;
- d) is generally considered to be deleterious or harmful to the environment within the building design professions;
- e) that that would or might be hazardous to health, generate premature or unanticipated waste or would or might have the effect of reducing the normal life expectancy:
 - i. of the materials, prefabricated items, equipment or systems themselves
 - ii. of any materials, prefabricated items, equipment or systems to which they are affixed; or
 - iii. of the structure in which they are incorporated or to which they are affixed
 - iv. to a period less than that which would normally be



E: CONSTRUCTION MATERIALS: PROCUREMENT (BASED ON TRISTAN'S CLAUSE)

2 ADDITIONAL CLAUSES FOR USE WITH JCT DESIGN & BUILD CONTRACT 2016

2.1 OPTION 1

Climate Impact of Materials

2.1A.3 In selecting materials and goods for use in the Works, the Contractor shall:

1. prior to the commencement of the Works, provide a list of the intended manufacturers and suppliers to the Employer's Agent and Carbon Consultant along with the climate impacts of the transportation of the same to the Site as against the Carbon Budget
2. liaise with the Employer's Agent and Carbon Consultant with regards to the list of intended manufacturers and suppliers and shall have due regard to the representations of the Employer's Agent and Carbon Consultant with regards to the same
3. [use best endeavours to ensure that the materials and goods are sourced from manufacturers and suppliers located as close to the Site as reasonably practicable;]
4. update the Employer's Agent and Carbon Consultant, on a monthly basis, with the actual climate impacts of the transportation of the materials and goods to the Site to date by reference to the levels set out in the list and the projected impact of the same for the remainder of the Works assessed against the Carbon Budget.



E: CONSTRUCTION MATERIALS: PROCUREMENT (BASED ON TRISTAN'S CLAUSE)

2 ADDITIONAL CLAUSES FOR USE WITH JCT DESIGN & BUILD CONTRACT 2016

2.1 OPTION 1

Climate Impact of Materials

- 2.1A.1 The Contractor shall provide to the Carbon Consultant as soon as possible, but in any event prior to the Contract being entered into and within ten (10) days of such a request being made, all information that the Carbon Consultant reasonably requests regarding the climate impacts, including the total embodied GHG Emissions, of the supply, transportation and use of materials and goods which are selected or used in carrying out the Works.
- 2.1A.2 The Contractor shall use all reasonable endeavours to minimise the GHG Emissions emitted by the carrying out of the Works including by the selection of products and materials and / or the adoption of construction / design techniques and processes that minimise the impact of GHG Emissions. The Contractor confirms that the total embodied GHG Emissions in the materials and goods used to construct the Works and GHG Emissions emitted in the construction of the Works shall not exceed the Carbon Budget.



E: CONSTRUCTION MATERIALS: PROCUREMENT (BASED ON TRISTAN'S CLAUSE)

- 2.1A.4 The Carbon Consultant shall liaise with the Employer's Agent as reasonably required to co-ordinate the monitoring of the Carbon Budget for the Development.
- 2.1A.5 The Carbon Consultant shall issue the Carbon Budget Report to the Employer, Employer's Agent and the Contractor on a [monthly] basis setting out the ongoing compliance of the Works against the Carbon Budget. The Carbon Budget Report may contain recommendations that the Carbon Consultant considers will reduce the GHG Emissions emitted by the carrying out of the Works. The Contractor shall have regard to all such recommendations provided that if a recommendation would constitute a Change under the Contract, the Contractor shall notify the Employer of such. The Employer may at its sole discretion instruct the implementation of the recommendation as a Change in accordance with clause 3.9 of this Contract. If the Employer does not instruct the recommendation of the Carbon Consultant as a Change then the Carbon Budget shall not be altered by the recommendation.
- 2.1A.6 The Contractor shall provide the Carbon Consultant with not less than [14] days prior notice of the date on which the Contractor expects practical completion of the Works in accordance with clause 2.27 to occur in order to allow the Carbon Consultant the opportunity to inspect the Works to ascertain the final GHG Emissions. Within [] days of such inspection, the Carbon Consultant shall provide a copy of the Final Carbon Budget Report to the Employer and the Contractor.

E: CONSTRUCTION MATERIALS: PROCUREMENT (BASED ON TRISTAN'S CLAUSE)

2.1A.7 If, following the inspection by the Carbon Consultant in accordance with clause 2.1A.6 above, the Final GHG Emissions exceeds the Carbon Budget due to a breach by the Contractor of its obligations under this [Clause: Climate Impact of Materials], then liquidated damages at the rate of £[X] per tonne of Carbon Dioxide Equivalent of Greenhouse Gas over and above the Carbon Budget, shall be due and payable from the Contractor to the Employer. To avoid doubt, liquidated damages payable under this Clause [] represent the reasonable commercial concerns of the Employer and its costs of [offsetting the excess GHG Emissions / remedying an equivalent breach of the development funding agreement].

2.1A.8 If, following the inspection by the Carbon Consultant in accordance with clause 2.1A.6 above, the Final GHG Emissions are lower than the target set out in the Carbon Budget:

1. the Carbon Consultant shall issue the Carbon Bonus Certificate to the Employer and the Contractor
2. the Contractor shall be entitled to the Carbon Bonus which shall be included in the Final Statement and paid in accordance with clause 4.24; and

3. if either party disagrees with the Carbon Bonus Certificate or Carbon Bonus, it may refer the matter to dispute resolution in accordance with Section 9 of the Contract.



E: CONSTRUCTION MATERIALS: PROCUREMENT (BASED ON TRISTAN'S CLAUSE)

2.1 OPTION 2 – shorter version

- 2.1A.1 The Contractor is required to carry out the Works so that the Carbon Budget is not exceeded.
- 2.1A.2 The Contractor is required to provide to the Carbon Consultant monthly management information on its ongoing compliance with [Clause 1] to enable the Carbon Consultant to assess the progress of the Works towards meeting the Carbon Budget and provide input to the Contractor on further progress
- 2.1A.3 If, at practical completion of the Works, the GHG Emissions incurred by the Contractor in carrying out the Works are lower than those set out in the Carbon Budget of the Works (excluding Changes issued in accordance with clause 3.9.1) the Carbon Budget of the Works (excluding Changes issued in accordance with clause 3.9.1) is exceeded due to a breach by the Contractor of its obligations under this [Clause 3], then liquidated damages at the rate of £[X] per tonne of Carbon Dioxide Equivalent of Greenhouse Gas over and above the Carbon Budget, shall be due and payable from the Contractor to the Employer. To avoid doubt, liquidated damages payable under this [Clause 3] represent the reasonable commercial concerns of the Employer and its costs of [offsetting the excess GHG Emissions / remedying an equivalent breach of the development funding agreement]
- 2.1A.4 If, at practical completion of the Works, the GHG Emissions incurred by the Contractor in carrying out the Works are lower than those set out in the Carbon Budget of the Works (excluding Changes issued in accordance with clause 3.9.1) then the following shall apply:
- 2.1A.4.1 the Carbon Consultant shall issue a certificate to the Employer and the Contractor setting out the percentage reduction in GHG Emissions as at practical completion of the Works from those set out in the Carbon Budget (the Carbon Bonus Certificate)
- 2.1A.4.2 the Contractor shall be entitled to a bonus payment of a percentage of the Contract Sum that is comparable the percentage by which the GHG Emissions have been bettered from those set out in the Carbon Budget (the Carbon Bonus)
- 2.1A.4.3 the Carbon Bonus shall be included in the Final Statement and paid in accordance with clause 4.24
- 2.1A.4.4 if either party disagrees with the Carbon Bonus Certificate or Carbon Bonus, it may refer the matter to dispute resolution in accordance with Section 9 of the Contract

F: CLIMATE ALIGNED CONSTRUCTION WASTE MANAGEMENT (BASED ON FRANCIS' CLAUSE)



F: CLIMATE ALIGNED CONSTRUCTION WASTE MANAGEMENT (BASED ON FRANCIS' CLAUSE)

1. CLIMATE ALIGNED CONSTRUCTION WASTE MANAGEMENT

1.1 ADDITIONAL DEFINITIONS

1. **Diverted Waste** means all Waste Materials that are recycled, reused, salvaged, composted or otherwise diverted from landfills or incineration
2. **Site Waste Management Plan** means the site waste management plan drafted by an appropriately qualified professional with relevant experience to diligently and competently manage waste in accordance with the Net Zero Objectives, in the form set out at [Appendix [X]] (approved by the Employer acting reasonably and without delay), which seeks to ensure materials are managed and disposed of efficiently and to reduce Waste Materials and GHG Emissions
3. **Waste Materials** means spoil, waste, rubbish, debris, materials or goods or surplus materials generated by or used in undertaking the Works which are not incorporated into the Works at practical completion

2. ADDITIONAL CLAUSES

2.1 SITE WASTE MANAGEMENT

- a) The Contractor shall ensure materials are managed efficiently and Waste Materials (which cannot be converted to Diverted Waste) are disposed of in accordance with [the Law / Statutory Requirements]
- b) The Contractor shall use best endeavours to minimise any Waste Materials and to turn Waste Materials into Diverted Waste where possible
- c) The Contractor shall where possible propose amendments to the Works which, if instructed as a Change, may result in a reduction of Waste Materials in carrying out the Works or the Completed Works
- d) The Contractor shall undertake the Works in accordance with the Site Waste Management Plan
- e) The Contractor shall ensure that the Site Waste Management Plan is kept up to date throughout the Project and where a Change is instructed the Contractor shall, after consultation with the Employer's Agent, update the Site Waste Management Plan where necessary and provide it to the Employer for approval
- f) The Contractor shall comply with all applicable waste duty of care criteria including without limitation ensuring that only licensed waste carriers are used and original waste transfer notes are retained for the correct statutory periods according to the nature of the waste and delivered to the Employer on a monthly basis and so that they can be included in the Health and Safety File
- g) The Contractor shall provide to the Employer all information that the Employer reasonably requests regarding the environmental disposal of Waste Materials
- h) The Employer shall have a right to access and inspect the Contractor's off-site manufacturing facility and audit its waste disposal processes at any time (but with reasonable notice)

G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)



G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

1

Carbon Footprint means the amount in tonnes of Carbon Dioxide Equivalent of Scope 1, 2 and 3 Emissions that will be released into the atmosphere as a result of the Works, determined in accordance with international GHG Reporting practice, being the accepted practice from time to time in relation to reporting for the purposes of the protocols to the United Nations Framework Convention on Climate Change.

2

Contractor's Programme means the [detailed activity schedule / programme] (including critical paths, sequences, interfaces and dependent items) that shall include:

- a) the activities and periods (start and finish dates) in respect of the substructure works, infrastructure works, superstructure works, the factory timetable, roof works and the on-site fit out, and in respect of all work packages including those by all other sub-contractors or suppliers, Statutory Undertakers, and any others
- b) dates by which the design work or drawings or the Net Zero Report to be produced by the Contractor or such other sub-contractors or suppliers will be submitted to the Employer for acceptance and the dates by which acceptance of such design work or drawings or Net Zero Report will be required by the Contractor, allowing a reasonable time for submittal and review and for the process to be repeated

- c) the date established as the Design Freeze in respect of the MMC Build
- d) any extensions of time provided under the Contract including in respect of implementing a Net Zero Modification pursuant to clause 2.3(a)(i)(B)
- e) the timetable and the period of notice required by the Contractor to check that the tolerances on-site are within agreed limits as set out in the Employer's Requirements and the Contractor's Proposals
- f) procurement periods and delivery dates for the major items of goods, equipment, prefabricated items and materials, including in respect of the MMC Build



G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

- g) dates by which the Works will be ready for inspection or testing by the Employer (including factory-based inspections and testing, and any waste monitoring)
 - h) dates in respect of satisfying quality control requirements that need to be met and their related inspections (including for the Insurance Backed Guarantee Scheme)
 - i) programme details including connection dates and dates when services are to be made or disconnected and re-made live (as applicable) for the connection of services and utilities
 - j) details and dates in respect of transportation and on-site erection, craneage and installation of the MMC Build and the [requirements / conditions required] during this period; and
 - k) holiday periods.
- 3 **Design Freeze** means the Employer's final approval of the completed design and associated processes for the MMC Build which indicates that no further changes are contemplated in the design of the MMC Build before the start of the off-site manufacturing process, and shall include the Employer's approval in respect of the Contractor's Net Zero Report issued pursuant to clause [4.1].

- 4 **Embedded Carbon** means:
- a) in relation to building materials, the total GHGs emitted by their extraction, manufacture, transportation and disposal at the end of their life; and
 - b) in relation to any other products, the total GHGs that occur through their manufacturing and production and the extraction, manufacture, transportation and assembly of every element in those products, as well as emissions caused by deconstruction at the end of their life.
- 5 **Insurance Backed Guarantee Scheme** means ICW, Premier Guarantee, National House Building Council, or any similar body providing insurance backed building defects insurance in respect of the Works (or any part thereof) including any accreditation in respect of the MMC Build's system, as may be approved by the Employer and notified in writing to the Contractor at any time.
- 6 **MMC Build** means the design, construction and installation of [*insert the MMC aspect*] and all associated [works / services] (if any) in respect of the off-site manufacturing process, including transportation and site logistics associated with delivery and installation (including craneage), as may be further detailed in [X] of the Employer's Requirements

G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

7

Net Zero means a balance by [2050 / insert earlier date] between [a party's] / [the [Company's / Parties']] sources and sinks of emissions of GHGs [in each calendar year]. This is achieved by reducing [a party's] / [the [Company's / Parties']] emissions of GHGs and removing GHGs [to achieve Paris Alignment].

8

Net Zero Modification Notice has the meaning given to it in clause [2.1].

9

Net Zero Objectives means:

a) to carry out the Works:

- i. responsibly, sustainably, ethically and in accordance with all applicable laws and best practice
- ii. consistently with both the Contractor's and the Employer's Net Zero Targets (including any interim targets notified to the other Party before the date of contract) and in a manner that prioritises reducing GHG Emissions before Offsetting any Residual Emissions; [and]
- iii. [in a matter that satisfies the requirements of, and does not place the Employer in breach or default of, the terms of the [Employer's sustainability linked loan / Employer's relevant Green Loan]]

b) to ensure that the Works:

- i. on practical completion [and during its operating life] has GHG Emissions per m2 (Carbon Intensity) which:
 - a) is Net Zero (by Offsetting only Residual Emissions); or
 - b) meets the [1.5 degree aligned Carbon Risk Real Estate Monitor (CRREM) decarbonisation pathway for that asset class / Paris Aligned decarbonisation pathway] (Asset Decarbonisation Pathway) and will continue to meet the Asset Decarbonisation Pathway each year from practical completion until 2050 without substantive capital outlay or retrofitting; and
- ii. is capable of withstanding the projected physical impacts of climate change (including increased intensity and frequency of catastrophic weather events, and gradual onset climatic changes in the region) [in a [SSP5 8.5 future] as set out in The Intergovernmental Panel on Climate Change's report AR6 Climate Change 2021: The Physical Science Basis (August 2021) from completion [until [insert date i.e. 2035] / until [15 years] after practical completion].

G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

10 **Net Zero Report** has the meaning given to it in clause 4.1.

11 **Net Zero Target** means a target to achieve Net Zero by [2050 / insert earlier date], and validated by [the Science Based Targets Initiative / insert other standard].

12 **Carbon Offsetting** means purchasing carbon credits equal to the amount of the Residual Emissions from the Works and in alignment with the Offsetting Strategy.

13 **Offsetting Strategy** means a plan specifying:

- a) the verified credits from a recognised offset provider that may be used by the [[Contractor / Parties] to offset [its / their] Residual Emissions
- b) How the [Contractor / Parties] will transition:
 - i. from using credits from offsetting projects that avoid or reduce emissions of GHG to projects that remove emissions of GHG; and
 - ii. to GHG removals that involve long-term storage methods with a low risk of reversal

- d) how the [Contractor / Parties] will [use best endeavours to] reduce [its / their] use of credits by reducing [its / their] Residual Emissions [to zero / by [●]%) by 2050; and
- e) the impact of the relevant offsetting projects on a just transition and wider social and environmental goals.

14 **Paris Alignment or Paris Aligned** means aligning with the goals in Articles 2.1 and 4.1 of the UNFCCC's Paris Agreement, in particular limiting global temperature increase to 1.5 degrees Celsius above pre-industrial levels and achieving Net Zero or net negative emissions by 2050 or sooner.

15 **Reclaimed Materials** means materials that have been removed from another building or site and which can be reused in the Works without substantial modification.

16 **Residual Emissions** means [a Party's] GHG Emissions [from the Works] that are emitted after all reasonable efforts have been made to reduce [their] GHG Emissions.

G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

17

Waste Materials means spoil, waste, rubbish, debris, materials or goods or surplus materials generated by or used in undertaking the Works (including for the avoidance of doubt the off-site manufacture of the MMC Build).

18

Works means the design, supply, construction, delivery to site, installation, commissioning, [remedy and repair] of the works as described in [•] and referred to in the [Employer's Requirements] and the [Contractor's Proposals] and including any changes made to those works in accordance with the Contract (whether carried out before or after the date of the Contract) and including all pre-construction work, MMC Build works, works for the provision of and diversion of services and all ancillary works carried out on or about the site.



G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

2 ADDITIONAL CLAUSES

1. Contractor's Obligations

The Contractor must carry out all of its obligations under the Contract in accordance with:

- a) the [Project Documents / Contract Documents]
- b) all applicable laws and standards; and
- c) Best Industry Practice.

In performing its obligations under the Contract, the Contractor shall and shall ensure through similar contractual provisions that each of its sub-contractors and suppliers shall:

- a) [comply with all applicable laws and standards including without limitation the Modern Slavery Act 2015, the Anti-Slavery Policy and the Employer's Anti-Bribery Policy;] and
- b) [use any digital tool(s) such as [IGNITE] as may be required by the Employer in respect of the MMC Build].

1.3 For the duration of the Contract, the Contractor Warrants that:

- a) it will use Best Industry Practice in carrying out its obligations under the contract
- b) it will achieve the Net Zero Objectives
- c) the Works will achieve the Net Zero Objectives as identified in the [Employer's Requirements] on Practical Completion [and during its operating life for such period and based on performance standards and / or specific compliance requirements as expressly set out in the Employer's Requirements
- d) [it shall not undertake any direct or indirect climate policy engagement, lobbying activities, trade association memberships or public policy positions that could reasonably be considered to undermine the goals of the UNFCCC's Paris Agreement;]

G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

- e) without derogating from any other provision in the Contract, that it shall use [Best Industry Practice] when designing the Works and in complying with clauses 1.2(b) and 1.3(f), except where the Employer's Requirements expressly sets out performance standards and / or specific compliance requirements in respect of the Works which the Contractor is required to comply with, in which case the Contractor shall comply with any such standards and / or requirements or such other higher compliance standard as required by law; and
 - f) the various elements of the design of the Works will be properly coordinated and integrated, one with another, and shall ensure that all aspects of the MMC Build shall be integrated and shall interface fully and properly with the other part or parts of the Works (including without limitation) the existing substructures, superstructures, cladding, utility and other services on the site in order that (but subject always to clause [2] (*Net Zero Modifications*)) it promotes the Net Zero Objectives.
- 1.4 The Contractor further acknowledges that the Design Freeze is integral to the Works, and that the Contractor shall coordinate all activities, and fully and properly integrate the design so as to facilitate the Design Freeze for the MMC Build.
 - 1.5 The Contractor shall ensure (or shall procure) that the MMC Build is collected, transported, handled, installed and commissioned on site by experienced and specialised professionals using the standard of care set out at clause 1.3 and in compliance with any Insurance Backed Guarantee Scheme requirements.

2. Contractor's Obligations [*Drafting note: incorporate Luna's clause*]

3. Climate Impact of Materials [*DN: incorporate Tristan's clause*]

G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

4. Net Zero Report

- 4.1 The Contractor must provide to the Employer a report on the last day of each [month/ insert appropriate time frame] before the Design Freeze and thereafter on the last day of each [quarter/ insert appropriate time frame] that describes conduct or actions taken to satisfy the Net Zero Objectives (Net Zero Report), together with the current and up-to-date Contractor's Programme.
- 4.2 The Contractor shall provide to the Employer a Net Zero Report before the anticipated date of the Design Freeze.
- 4.3 The Employer must notify the Contractor within [10 Business Days] of receiving the Net Zero Report if the Employer:
- accepts the Net Zero Report
 - considers that the Contractor is not meeting the Net Zero Objectives (in which case the Employer must set out its reasons for reaching this conclusion); or
 - requests further information from the Contractor to enable the Employer to properly assess the Net Zero Objectives or any part of the Net Zero Objectives that has not been approved or rejected, in which case the process under this clause [4.3] shall repeat on receipt of such further information by the Employer.
- 4.4 If the Employer issues a notice under clause [4.3(b) or (c)] the Contractor must promptly comply with the requirements set out in that notice, and within [10 Business Days] notify the Employer of the changes which have been implemented, provided always that the Employer shall not be obliged to approve the Design Freeze until it receives a satisfactory Net Zero Report and a revised Contractor's Programme.
- 4.5 If the Contractor does not comply with this clause [4], this will be deemed a [substantial breach of the Contract] and the default clause [●] will apply.



G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

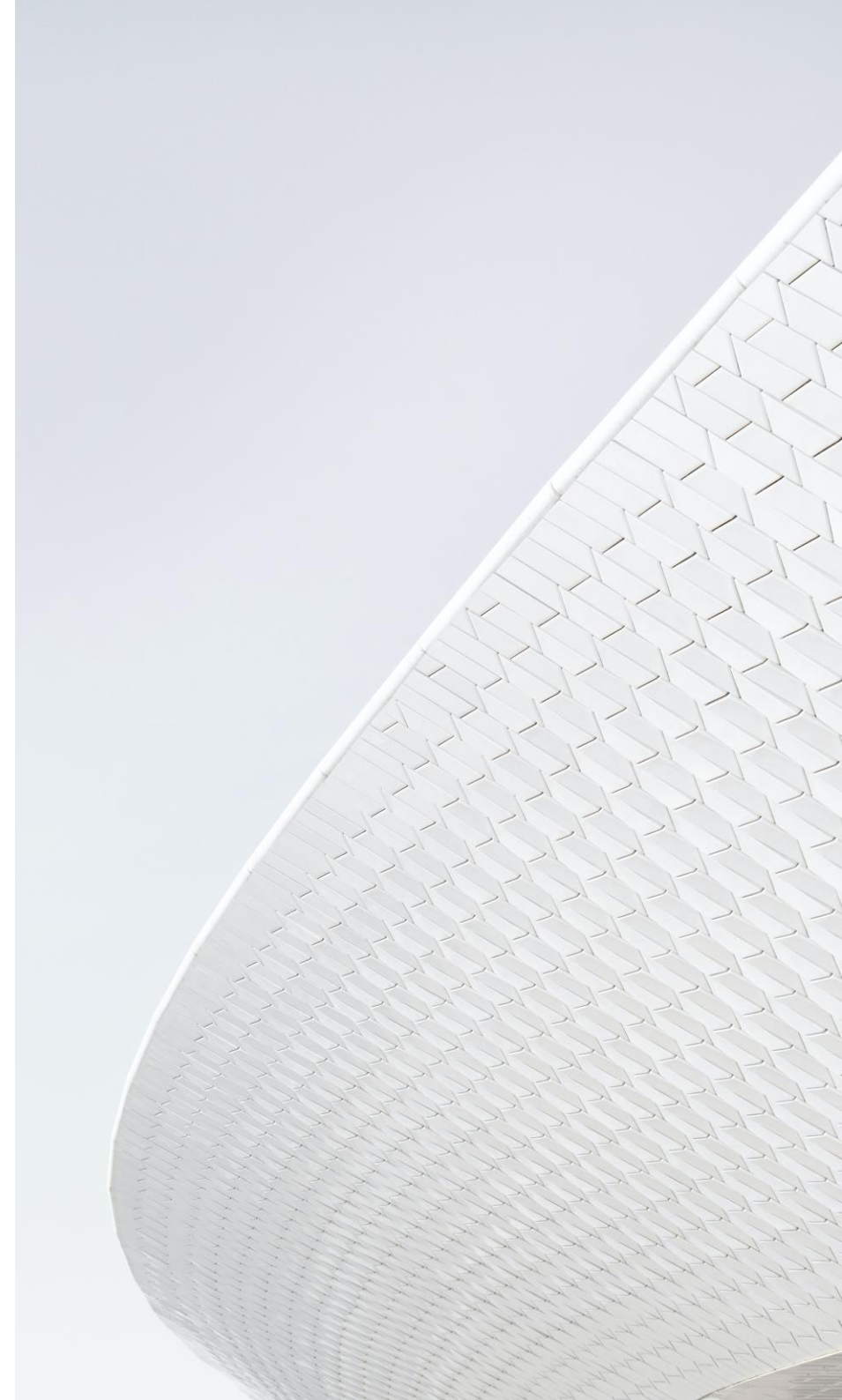
5. Practical Completion

- 5.1 For the purpose of assessing whether Practical Completion of the Works has been achieved, the Employer shall not issue any [Practical Completion Statement]/[certificate] to that effect until:
- a) such time as the matters set out in Appendix [X] of the Employer's Requirements (including the EPC Obligation for the Works) have been met; or
 - b) specific agreement has been reached between the Employer and the Contractor to urgently achieve any of the matters set out in Appendix [●] of the Employer's Requirements (including the EPC Obligation for the Works) during the course of the Rectification Period, which may include (without limitation):
 - i. the Employer requiring the Contractor to undertake remedial works (such remedial works to include, but not be limited to, retrofitting as necessary to achieve the EPC Obligation or (if achievement is not possible) improve the energy performance of the Works)
 - ii. provided that the total aggregate costs (excluding VAT) of the remedial works referred to in clause [5.1(b)(i)] (which shall be borne by the Contractor) do not exceed [[10]% of the Contract Sum].
- 5.2 [Without prejudice to clause [5.1], if at the [Target Date for Practical Completion]] the MMC Build fails to comply with and/or achieve [any one or more] of the Net Zero Objectives as expressly set out in [X] of the Employer's Requirements, the [Contract Sum] shall be reduced by such amount as shall be appropriate to cover the reduced value to the Employer because of this failure (to be agreed by the Parties or ascertained pursuant to clause [X]).
- a) Any sums that may be repayable by the Contractor to the Employer under clause [5.2.(a)] in respect of such reduced [Contract Sum] are payable within [(20) Business Days] of the [expiry of the Rectification Period].
 - b) For the avoidance of doubt, the price adjustment under this clause [5.2] represents the reasonable commercial concerns of the Employer [and the impact on the Employer's built asset for the Contractor's failure to comply with [any one or more] Net Zero Objectives as expressly set out in [X] of the Employer's Requirements.]

G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

- 5.3 The Employer shall not be required to issue any Certificate of Making Good earlier than the expiry of the Rectification Period and/or before the matters set out in Appendix [X] to the Employer's Requirements for such Works have been met.
- 5.4 Before issuing the [Practical Completion Statement] the Contractor shall supply to the Employer provisional operation and maintenance manuals in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust, extend and repair any aspect of the MMC Build. Within 2 (two) months of issuing any [Practical Completion Statement], the Contractor shall supply to the Employer the final operation and maintenance manuals in such detail and any other manuals specified in the Employer's Requirements for these purposes.

6. Site Waste Management [*DN: incorporate Francis' clause*]



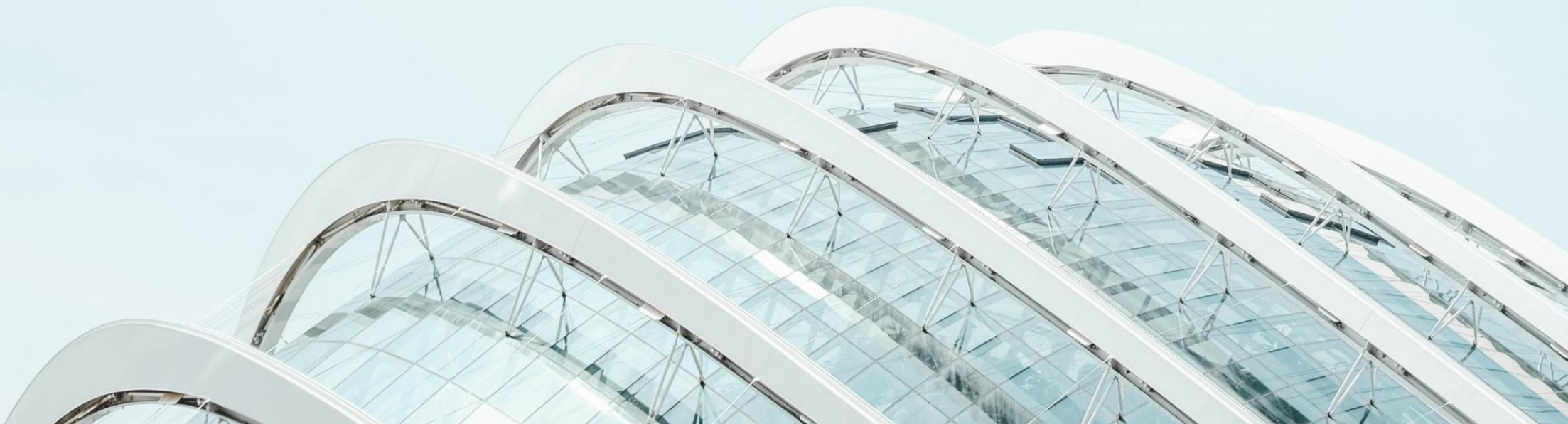
G: MODERN METHODS OF CONSTRUCTION (MMC) AND NET ZERO PROVISIONS FOR CONSTRUCTION OR DEVELOPMENT AGREEMENTS (BASED ON MADHAVI'S CLAUSE)

7. Offsetting

- 7.1 Before the [commencement of the Works] the Parties shall agree an Offsetting Strategy that aligns [as far as possible] with the Oxford Principles for Net Zero Aligned Carbon Offsetting.
- 7.2 The Parties shall agree the respective shares in which the Parties shall bear the cost of Offsetting.
- 7.3 Practical Completion shall be conditional upon [the Contractor/ Parties] purchasing the offsets in accordance with the Offsetting Strategy referred to in Clause 7.1.
- 7.4 Within [[X] Business Days] of [Practical Completion] of the Works the [Parties]/[Contractor] shall calculate the quantity of offsets required to equal the Residual Emissions of the Works.



H: GREEN INCENTIVE BONUS (BASED ON ASHKAN'S CLAUSE)



H: GREEN INCENTIVE BONUS (BASED ON ASHKAN'S CLAUSE)

1. DEFINITIONS

- 1. Alternative Green Working Practices** has the meaning given to it in Clause 2.1.
- 2. Contractor Related Party** means the Contractor's employees, subcontractors and agents and any persons engaged by the Contractor in connection with the Works or any part thereof.
- 3. Cycle to Work Scheme** means the UK Government tax exemption initiative introduced in the Finance Act 1999 to promote healthier journeys to work and to reduce environmental pollution.
- 4. Electrification** means converting or replacing infrastructure, machines, appliances, devices and other objects which are powered by a Finite Power Source so that electricity is used as a permanent replacement power source.
- 5. Energy Efficient Equipment** means tools and equipment which achieves Energy Savings and associated Greenhouse Gas emission reductions and includes (without limitation) all-electric heavy construction equipment, hybrid and low-carbon equipment, diesel-alternatives, and equipment powered by the national grid rather than on-site diesel generators.
- 6. [Energy Savings** means the amount of energy or fuel saved following implementation of energy efficient measures or practices calculated in accordance with Schedule [X].]
- 7. Finite Power Source** means a power source which is reliant on hydrocarbons.
- 8. Green Charitable Organisation** means *[INSERT details of nominated organisation]* or their successors or permitted assignees as the case may be from time to time.
- 9. Green Retention Fund** means the amount of [to be agreed between the parties]% of the Contract Price/Gross Valuation [Drafting Note: cross-refer to appropriate definition in the Contract] to which the Contractor may be entitled pursuant to Clause 3.2.
- 10. Green Working Practices** means the working practices set out in Schedule 1, as updated from time to time.
- 11. Greenhouse Gases (GHGs)** means the natural and anthropogenic gases which trap thermal radiation in the earth's atmosphere and as specified in Annex A to the Kyoto Protocol to the United Nations Framework Convention on Climate Change (UNFCCC) [or otherwise specified by the UNFCCC at the date of this agreement]. [These GHGs are currently: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).]

H: GREEN INCENTIVE BONUS (BASED ON ASHKAN'S CLAUSE)

- GHG Emissions Monitoring System means a system to monitor the amount of GHG emissions at the Site over a specified period of time, each expressed as a total in units of carbon dioxide equivalent [in accordance with the requirements of Regulation (EU) No 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/EC of the European Parliament and of the Council].
- Green Working Practices Report has the meaning given to it in Clause 1.3.
- Green Working Practice Notice has the meaning given to it in Clause 2.1.



H: GREEN INCENTIVE BONUS (BASED ON ASHKAN'S CLAUSE)

2. ADDITIONAL CLAUSES

1. CONTRACTOR'S GREEN WORKING PRACTICES

- 1.1 The Contractor shall use all reasonable endeavours to, and shall use all reasonable endeavours to ensure materials are managed efficiently and Waste Materials (which cannot be converted to Diverted Waste) are disposed of in accordance with the [applicable law/ the Law/ Statutory Requirements [Drafting note: Align with definitions in the main contract]] and in a way that maximises the prospect of achieving the Employer's Net Zero Target.
- 1.2 The Contractor shall procure a GHG Emissions Monitoring System in order to record the GHG emissions reductions as a result of the Green Working Practices.
- 1.3 The Contractor shall submit a written report to the Employer on a [quarterly basis] identifying:
 - 1.3.1 the actions taken by the Contractor and any Contractor Related Party to implement the Green Working Practices;
 - 1.3.2. the Energy Savings and GHG reductions achieved during the previous [quarter] as a result of the steps taken to implement the Green Working Practices; and
 - 1.3.3. any failure to implement the Green Working Practices and the actions being taken to remedy such failure,
(a Green Working Practices Report).
- 1.4 Within [7] Business Days of receipt of a Green Working Practices Report by the Employer, the Employer shall (acting reasonably) notify the Contractor in writing whether or not it agrees with the contents of the Green Working Practices Report, including for the avoidance of doubt, any actions being taken under Clause 1.3.3 if applicable. Any such notification shall include reasons for the Employer's decision in the event that the Employer does not agree with the contents of the Green Working Practices Report.



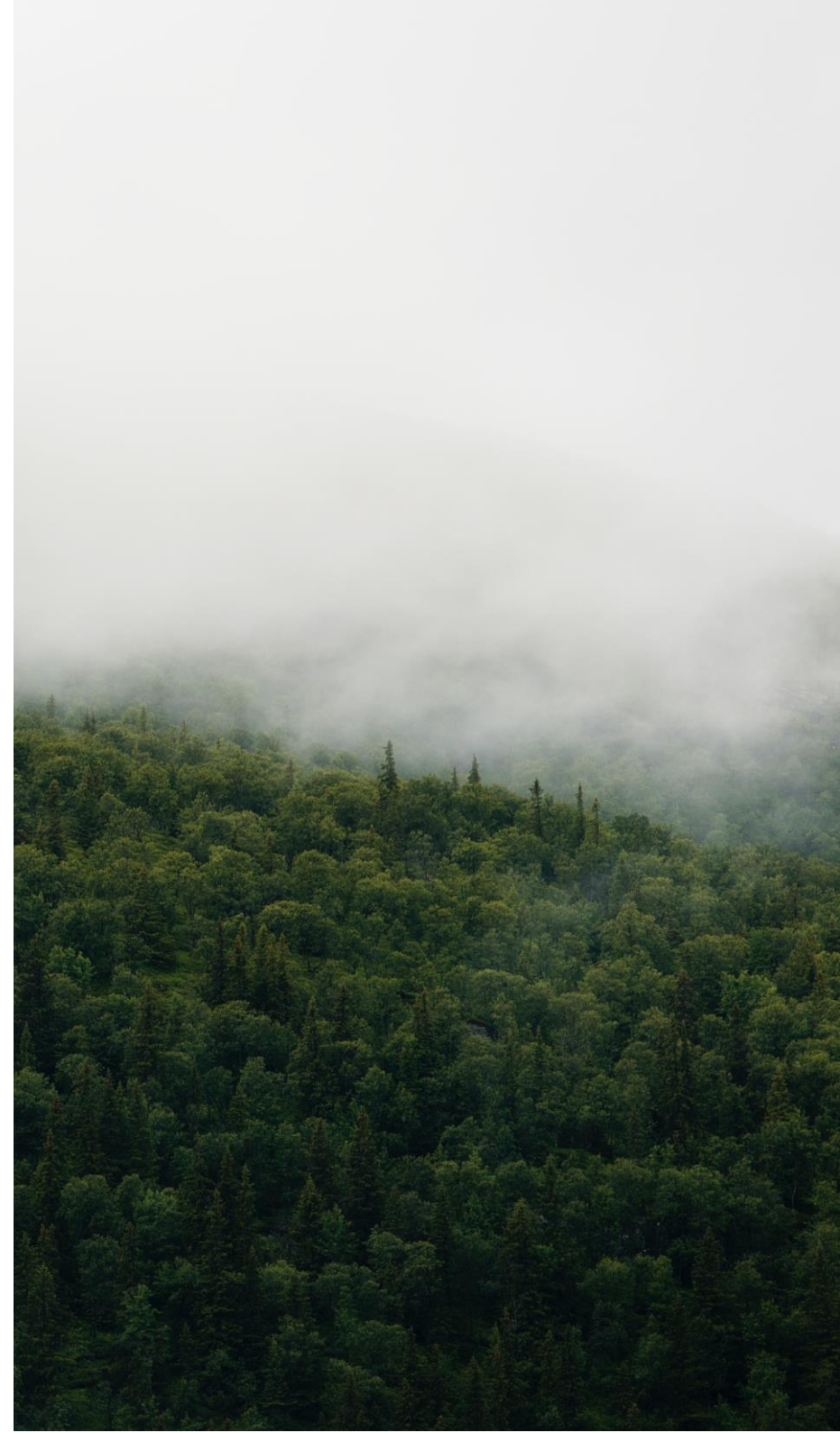
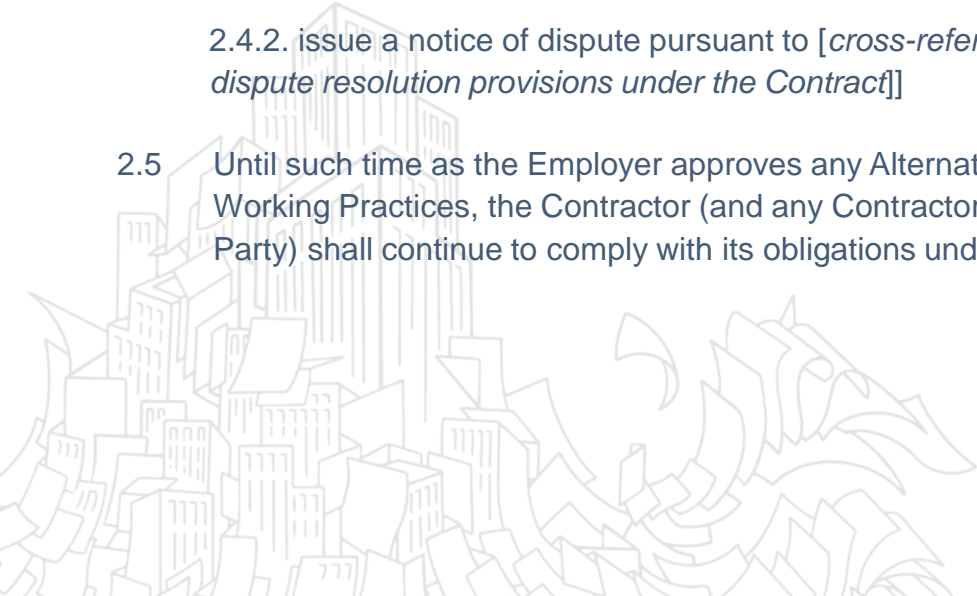
H: GREEN INCENTIVE BONUS (BASED ON ASHKAN'S CLAUSE)

2. ALTERNATIVE GREEN WORKING PRACTICES

- 2.1 During the course of the Works, the Contractor may propose alternative Green Working Practices (Alternative Green Working Practices) by giving a written notice (Green Working Practice Notice) to the Employer setting out:
- 2.1.1. the proposed Alternative Green Working Practice(s) and the original Green Work Practice(s) which the Alternative Green Working Practice(s) [is/are] intended to replace;
 - 2.1.2. the reason for the Alternative Green Working Practice(s);
 - 2.1.3. the time within, and the manner in which, the Contractor proposes to implement the Alternative Green Working Practice(s);
 - 2.1.4. the effect (if any) the Alternative Green Working Practice(s) will have on the construction programme (including any extension of time required to the Date for Practical Completion);
 - 2.1.5. the effects (if any) the Alternative Green Working Practice(s) will have on the Contractor's ability to satisfy its obligations under the Contract;
 - 2.1.6. the additional Energy Savings and GHG emissions reductions, the Alternative Green Working Practice(s) will have;
 - 2.1.7. the cost impact (if any) to the Employer arising from the Alternative Green Working Practice(s); and
 - 2.1.8. any other relevant information reasonably required by the Employer to assess the Alternative Green Working Practice(s).
- 2.2 Within [14] Business Days of receipt of a Green Working Practice Notice from the Contractor, the Employer shall (acting reasonably) issue a notice to the Contractor which either:
- 2.2.1. approves the Alternative Green Working Practice (either in whole or part);
 - 2.2.2. rejects the Alternative Green Working Practice (either in whole or part), setting out reasons for any such rejection; or
 - 2.2.3. requests further information from the Contractor to enable the Employer to properly assess the Alternative Green Working Practice or any part of the Green Working Practice which has not been approved or rejected.

H: GREEN INCENTIVE BONUS (BASED ON ASHKAN'S CLAUSE)

- 2.3 If the Employer has approved the proposed Alternative Green Working Practice pursuant to Clause 2.2.1, the Contractor shall cease implementing the original Green Working Practice(s) and shall instead proceed with implementing the approved Alternative Green Working Practice(s) in accordance with Clause 1.
- 2.4 If the Employer rejects the Alternative Green Working Practice(s) (in whole or in part) under Clause 2.2.2, the Contractor may:
- 2.4.1. amend the Green Working Practice Notice to address the Employer's reasons for rejection, and re-submit the modified Green Working Practice Notice pursuant to Clause 2.1; [or
 - 2.4.2. issue a notice of dispute pursuant to [*cross-refer to dispute resolution provisions under the Contract*]]
- 2.5 Until such time as the Employer approves any Alternative Green Working Practices, the Contractor (and any Contractor Related Party) shall continue to comply with its obligations under Clause 1.



H: GREEN INCENTIVE BONUS (BASED ON ASHKAN'S CLAUSE)

3. CONSEQUENCES OF COMPLIANCE WITH THE GREEN WORKING PRACTICES

3.1 The Parties acknowledge and agree that the consequences of any compliance or otherwise by the Contractor or any Contractor Related Party with Clause 1 shall be as set out in this Clause 3.

3.2 Subject always to the Contractor complying with its reporting obligations under Clause 1, where the Contractor or any Contractor Related Party has implemented the Green Working Practices (including for the avoidance of doubt any approved Alternative Green Working Practices), the Contractor shall be entitled to payment from the Green Retention Fund on the following basis:

3.2.1. where the Contractor has properly demonstrated it has implemented [between two and four] Green Working Practices every [quarter] from the date of commencement up to the date of practical completion, it shall be entitled to a payment of [40]% of the Green Retention Fund;

3.2.2. where the Contractor has properly demonstrated it has implemented [five or more] Green Working Practices every [quarter] from the date of commencement up to the date of practical completion, it shall be entitled to a payment of [80]% of the Green Retention Fund;

3.2.3. where the Contractor has properly demonstrated it has implemented [eight or more] Green Working Practices every [quarter] from the date of commencement up to the date of practical completion, it shall be entitled to a payment of [100]% of the Green Retention Fund.

3.3 Any sums due to the Contractor under this Clause 3 shall be included in the Contractor's final payment application [Drafting note: cross-refer to payment provisions in the Contract and amend as necessary].

3.4 If there is any amount left in the Green Retention Fund after the Contractor has received the proportion to which it is entitled in accordance with Clause 3.2, any such amount shall be donated to the nominated Green Charitable Organisation or such other Green Charitable Organisation as the parties agree in writing.

H: GREEN INCENTIVE BONUS (BASED ON ASHKAN'S CLAUSE)

SCHEDULE 1: GREEN WORKING PRACTICES

- a) the use of energy-saving lighting (including but not limited to light emitting diodes (LEDs) and compact fluorescent lamps (CFLs) and suitable insulation in [100]% of all lighting and insulation to be used in Site facilities;
- b) reducing water usage (including but not limited to implementing eco-friendly low flow faucets and toilets on Site and adopting other low-carbon alternatives for Site facilities);
- c) recycling and reusing materials on Site wherever possible and practicable (including but not limited to having appropriate recycling facilities on-site);
- d) Purchasing all electricity used on Site from renewable sources;
- e) the Electrification of at least [50]% of construction tools on Site and at least 60% of energy using equipment at Site to be Energy Efficient Equipment;
- f) preventing the use of single-use plastic on Site as far as reasonably practicable and providing alternative facilities such as water bottle-filling stations to achieve this goal;
- g) reducing noise pollution created while carrying out and completing the Works (including but not limited to limiting the use of on-site diesel generators);
- g) engaging employees [and subcontractors] based within a [10] mile radius to the Site where possible;
- h) promoting green travel for staff to and from Site (including but not limited to offering the Cycle to Work Scheme to the Contractor's employees working on Site);
- i) minimising the impact of any excavation works on the area surrounding the Site;
- j) registering with the Considerate Contractors Scheme and adhering to the Code of Considerate Practice as published by the Considerate Contractors Scheme and updated from time to time *[Drafting note: CCS is a UK based scheme, projects abroad should seek to replace with an alternative national or local scheme where possible]*;
- k) using, where reasonably practicable, green technologies in welfare facilities on Site and/or in the Works, including motion sensors and access card readers, to allow parts of the Site and/or Works, as the case may be, which are not in use to power down and reduce energy consumption whilst unoccupied; and
- l) where the Contractor is a UK Green Building Council member, taking reasonable steps to be added to the UK Green Building Council's Climate Commitment Platform with a headline commitment to reflect its agreement to implement these Green Working Practices.

I: SUBCONTRACTOR/SUPPLIER SELF-ASSESSMENT CLIMATE QUESTIONNAIRE (BASED ON ROBYN'S QUESTIONNAIRE)



I: SUBCONTRACTOR/SUPPLIER SELF-ASSESSMENT CLIMATE QUESTIONNAIRE (BASED ON ROBYN'S QUESTIONNAIRE)

SUBCONTRACTOR/SUPPLIER GUIDANCE [*Drafting Note: consider making this a requirement for Contractor to obtain from all sub-contractors*]

- To improve our own sustainability targets as a purchaser and/ or provider of construction services, we must ensure that our supply chain is also accountable for the same or similar targets. All construction stakeholders should be responsible for managing their own environmental, social and governance (ESG) impact on a project, which should be shared with or flowed down to any other subcontractors/suppliers.
- This Subcontractor/ Supplier Self-Assessment Questionnaire (SSAQ) is intended to be used as a self-reporting system for subcontractors/ suppliers working on all aspects of a construction project to develop and accelerate climate risk and emissions reduction strategies. The SSAQ is used to establish a baseline of ESG practices and act as a management tool against which to measure performance improvements on a project. The aim is to ensure all stakeholders are aware of and accountable for targets that may be agreed. It is our expectation (as the Client/ Employer) that all members of our subcontract/ supply chain will be working to improve overall ESG targets during the life cycle of our projects. We therefore encourage all subcontractors/suppliers to respond wholly and candidly to the SSAQ to ensure true baselines are recorded.
- This SSAQ should be used to streamline subcontractor/ supplier approaches and develop constructive dialogue between all involved, with the aim of strengthening relationships based on a shared ambition to achieve net zero targets in construction.
- To adequately self-assess and complete the SSAQ you, as a subcontractor/supplier, will need to gather certain information about the project and your business. We suggest appointing an internal representative to gather such data (e.g. Senior Manager, Human Resources or ESG director).
- Please note that the SSAQ requires the gathering of limited personal data: we ask that you adhere to any applicable legal requirements relating to data and privacy (including under the [General Data Protection Regulation \(EU\) 2016/679](#)). Any personal information collected in this form will be used solely for the purpose of determining whether to enter into a business relationship with your firm. [We may disclose and/ or transfer any such information to any group of companies, any of our business partners (if applicable) or advisers]. Please inform your [*insert client name*] contact should you need to amend the information that you have provided.

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